DOCUMENT RESUME

ED 080 679 VT 020 858

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TITLE	A Developmental Program of Occupational Education. Final Report.
INSTITUTION	Cobb County Board of Education, Marietta, Ga.
SPONS AGENCY	Bureau of Adult, Vocational, and Technical Education (DHEW/OE), Washington, D.C.
PUB DATE	73
GRANT	OEG-0-70-4781(361)
NOTE	149p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	*Career Education; *Cluster Grouping; *Curriculum Development; *Developmental Programs; Disadvantaged Youth; *Occupational Clusters; Program Evaluation; School Community Relationship; Vocational Counseling; Vocational Education
IDENTIFIERS	Georgia

ABSTRACT

The goal of this project was to develop and implement a program of career education in a pilot cluster of schools in Cobb County, Georgia. The approach fused aspects of vocational education, guidance, and a broad-based curriculum into a systematic and sequential effort within the elementary, middle, and secondary schools. Such an effort was designed to facilitate a comprehensive education for all students by including development of work skills and attitudes suited to an area of rapid growth in population, industry, and technology. The project by design and by nature placed special emphasis on students who were culturally, economically, or otherwise handicapped or disadvantaged. Programs at all levels, guidance programs, and job placement services are detailed in the report. Based on three years' continuous in-house evaluation and on an outside evaluating, it was concluded that career education is an operational effort in Cobb County, Georgia and that the activity-centered approach has gained widespread acceptance from students, teachers, administrators, and parents. The project staff concluded that career education promotes a community-wide feeling that education is the joint responsibility of the home, the school, and the community. Almost half of the document is comprised of the project evaluation from the Center for Occupational Education, North Carolina State University, Raleigh, North Carolina. (MF)

ED 080679

Final Report

Project No. V061063
Contract No. OEG-0-70-4781 (361)

A Developmental Program of Occupational Education

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

This project reported herein was performed pursuant to a contract with the Bureau of Adult, Vocational, and Technical Education, Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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1970 - 1973

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SUMMARY

This final report covers the period from July 1, 1970 through June 30, 1973.

Goals and Objectives

The overall goal of this project was to develop and implement a developmental program of career education in a pilot group (cluster) of schools within the Cobb County, Georgia School System. The approach has been to fuse promising aspects of vocational education, guidance and a broad-based curriculum into a systematic and sequential effort within the elementary, middle and secondary schools. The approach has been to facilitate the system's providing a comprehensive education for all youngsters. Such a comprehensive effort was designed to include development of work skills and attitudes that are suited to an area of rapid growth in population, industry and technology. The project by design and by nature places special emphasis on those students who are culturally, economically or otherwise handicapped or disadvantaged.

I. Process Objectives

A. Programs in Grades K-6: This project has developed and is implementing a career development program into the existing curriculum to enhance traditional academic learning and to accomplish certain career development objectives. Community resources have been utilized by having representative workers come into the schools and by having students visit work sites, so as to develop within Cobb County students a feeling that their education is the joint responsibility of the school, the home and the community.

B. Programs in the Middle School: This project has developed and is implementing programs of career exploration and prevocational orientation into the school situation to enhance traditional academic learning and to accomplish certain career development objectives. Community resources have been utilized by having representative workers come into the schools, by having students visit work sites and by having students participate in work-experience programs such as P. E. C. E.

C. Programs in the Secondary School: Teachers have utilized the subject-centered unit approach and planned, implemented and evaluated one (1) project unit per quarter. Those career areas and clusters closely tied to the subject field were covered and students were given an opportunity to relate skills and concepts to their own career interests. As a result, this approach provided students with specific knowledge and academic skills in selected career areas. The vocational curriculum clusters were offered in two (2) two hour classes for students in grades 11-12. In addition, the vocational curriculum was offered on a twelve (12) month schedule, organized on a quarterly basis.

D. Job Placement:

1. The Job Placement Service represented one (1) facet of the Career Development Program for the secondary school. Incorporated into the 1971-72 school program, the service functioned to assist students in securing an educationally-oriented job opportunity. Attention was given to the placement needs of every student with special emphasis being placed on the disadvantaged and potential drop-out students. All students in the school, including those in work study programs such as C.V.A.E., D.C.T., D.E. and V.O.T., were actively recruited for job openings.

2. A sequential procedure for developing, implementing, expanding, and evaluating the job placement service was followed. In the developmental stage, an analysis and assessment of existing placement services was made. Also, a survey was made of the student body to determine which students were working, where and how they obtained their jobs and to identify those

students desiring help in job placement. At the same time, a survey of community businesses was initiated with approximately two hundred (200) businesses being surveyed to identify the opportunities for full and part-time student employment.

3. During the implementation stage, a centralized placement office was established to facilitate the students' and businesses' contact with the placement coordinator and to house placement information. Announcements of all job openings were made to students through intercom messages, announcement bulletins and through messages posted on a central guidance office bulletin board. Radio spot announcements, newspaper articles and civic club speeches were some of the media utilized by the placement coordinator to publicize the service and to stimulate interest and support from all segments of the community. In addition to matching students with jobs offered by businesses, the coordinator also sought particular jobs requested by students.

4. In the effort to expand the services of the placement coordinator to other secondary schools in the County, the local Board of Education voted in the late spring of 1973 to institute a system-wide service for all secondary students. This service would by implemented beginning in July of 1973. (See Appendix A)

5. In evaluating the effectiveness of the placement program, an assessment of the numbers of businesses contacted, totals of students placed and numbers of community contacts was necessary. Also, the degree to which the methods and materials of the pilot effort were incorporated into the on-going instructional program of the County was considered. Approximately three hundred (300) students were placed in full or part-time work by the direct efforts of the placement officer during the pilot effort and additional referrals were made to other placement agencies within the school. The efforts of the service will be expanded to all secondary schools in the County in 1973-74.

E. Guidance: The secondary guidance program supported classroom activities through providing both direct and indirect assistance to students in the Career Development process. This assistance is accomplished through classroom group guidance sessions covering self-motivation; personality variables and abilities; educational and occupational avenues; and systematic decision-making. Also, the guidance program provided career information and individual counseling for students.

F. Post-Secondary Placement: This project provided students early placement into the post-secondary area vocational-technical school during their senior year. Also, students who have participated successfully in the cluster program at the vocational high school have been given advanced placement at the voc-tech school.

G. Differentiated Staffing: A modified version of differentiated staffing was used to fuse the academic, vocational, guidance and community resources into one educational package.

H. Disadvantaged and Handicapped: School experiences were organized to insure greater probability of success for disadvantaged and handicapped youth.

II. Product Objectives

A. Elementary School Level: The Career Development Program at the elementary school level is informational and orientational in nature. The effort is directed toward expanding the student's awareness of self characteristics as they relate to his environment. Also, efforts are made to provide a practical application for academic concepts. Career Development is an educational approach that presents the opportunity and promotes the ability to consider alternatives in choosing occupational aspirations, educational pursuits and other activities toward personal fulfillment.

B. Junior High School: At the junior high level, program efforts are concerned with further orientation and exploration; with exploratory activities divided into three (3) phases:

Phase I (seventh grade) makes the transition from information to orientation, from the self-contained classroom into the team approach using four (4) academic teachers in conjunction with a team of five (5) exploratory teachers. Seventh grade teachers utilize a team unit approach which shows how subject matter concepts are applied in the work community.

Phase II (eighth grade) offers the student an opportunity to further orient himself with several broad occupational areas and to acquire a base of understanding for future education and occupational decision-making. The eighth grade program combines the team approach and the efforts of the Program of Education and Career Exploration (P.E.C.E.) Coordinator. Academic teams are developing units centered around the clusters investigated in the P.E.C.E. Program.

Phase III (ninth grade) provides students the opportunity to explore a particular occupational area such as Business and Distribution, Industrial Arts and Human Services in greater depth. Both prevocational and academic teachers are involved, though students are no longer being block scheduled. Teachers tie-in their subject matter concepts to prevocational units covered.

C. Senior High School: Career Development Programs at this level are exploratory and preparatory in nature. They assist the student in converting his occupational preference into reality by providing subject matter concepts and skills pertinent to individual career aspirations rather than prescribed tracks.

D. All Educational Levels: This project at all educational levels will have the following goals:

1. To offer an educational approach that is relevant to the individual needs, ambitions and abilities of each student.

2. To enhance the traditional curricula.

3. To stimulate student interest and participation, thus providing additional motivational strategies.

4. To develop student's self awareness by helping him identify his personal characteristics through Career Development activities.

5. To develop within the student a feeling for the inter-dependence of the home, school and community's responsibility for his education.

6. To create opportunities for the student to utilize his subject matter in manipulative learning situations.

7. To provide opportunities for the student to observe the practical application of academic subject matter in the work community.

8. To stimulate occupational awareness by systematically exposing the student to broad occupational areas.

9. To provide the student additional experiences in relating to adults through interviews in the classroom and on field trips.

10. To help create the feeling within the student of the need for cooperative efforts and the worth of each person's contribution in working toward a common goal.

11. To provide the opportunity for participation in activities relating to the economic system, thus developing an awareness of that system.

12. To help the student develop his decision-making skills and provide for his participation in the decision-making process.

13. To involve the student in planning his own learning experiences by his participating in the selection of units to be implemented.

14. To include aspects of, but not be synonymous with either Vocational Education or Guidance and Counseling.

15. To help the student identify with workers in his home, his school and his community.

16. To apply to all students, regardless of their abilities, skills and occupational interests.

17. To present Career Education as an approach to education rather than an additional "subject."

III. Contributions Made

The development of a sequential model for career education for the elementary through the secondary levels was accomplished. This model prepared students to either enter work or to seek post-secondary training or education. As it was developed, the model was at the center of the educational process rather than at the periphery, and served as a model for the State of Georgia and other States in the Country.

Academic education, guidance and counseling, and vocational education were integrated at all levels in order to enable the student to choose more realistically, at any point in his learning process, the next step which would best serve his abilities and interests.

IV. Procedures Followed

Procedures outlined in the initial stages of the project were utilized in the further conceptualization, implementation, modification, evaluation, and dissemination of the model. Those procedures included:

A. Identification of career development objectives at the elementary; middle and secondary levels as derived from student and societal needs.

B. Review and assessment of existing research, resources, approaches and technology within and outside the Cobb County School System for use in selection of process and plans for execution of the processes for accomplishing identified career development objectives in a cluster of schools. (One (1) secondary school, fed by one (1) middle school and four (4) elementary schools.)

C. Provision for implementation, continuous evaluation and modification of the process for accomplishing identified career development objectives within the previously mentioned cluster of schools.

D. Conduction of final implementation, process and product evaluation and dissemination.

Elementary Level:

The implementation phase of the elementary career development program was initiated during the 1970-71 school year. A cluster of four (4) pilot elementary schools was chosen largely because it represented a cross sampling of all the elementary schools in Cobb County. One (1) teacher from each grade level, generally on a voluntary basis, was selected from each of the four (4) schools. These twenty-four (24) teachers attended a three (3) day workshop conducted by the project staff one (1) week before the opening of school. Their workshop participation was the first orientation and exposure for these teachers toward a career development approach to education.

During the first year of the program, each teacher was asked to implement one (1) career development unit per grading period for a total of four (4) per year. The two (2) elementary career development specialists worked very closely with the teachers in helping them select unit topics, obtain needed materials, and implement the units. Six (6) components or elementary were to be a part of each unit conducted and these elements were: hands-on activities, all subject tie-in, resource persons, field trips, role playing, and occupational awareness. The two (2) specialists met weekly with the pilot teachers and suggested ways that these elements could be tied into the chosen unit topics. In addition to these regular meetings, the career development specialists obtained all materials the teachers needed, set up all field trips, contacted and arranged for many of the resource persons, conducted visitation tours for outside systems visiting the project and, in general, acted as a liason between the school and the community.

Numerous in-service meetings and workshops were held during the school year. These workshops were successful in obtaining commitment from the elementary teacher toward this activity-centered approach to education. Other outcomes of these in-service meetings were: an analysis of elementary textbooks to determine how many occupations were covered and to what extent; development of new career units; and better unit implementation techniques.

During the 1970-71 school year, the twenty-four (24) elementary teachers in the project planned and implemented ninety-six (96) career development units. In addition to relating their experiences with visitors from Georgia and many out-of-state systems, the teachers shared ideas with co-workers from their own schools and from other schools.

When the 1970-71 school year ended, the project staff followed the expansion plan as stated in the original proposal, which called for one (1) additional teacher at each grade level. In three (3) of the pilot schools, more than one (1) teacher volunteered at each grade; however, the staff followed the proposal and involved a total of forty-eight (48) teachers. These forty-eight (48) teachers met for a two (2) day summer in-service workshop conducted by the project staff. During this workshop session, teachers "role played" as both students and teachers to become more familiar with unit implementation procedures.

A curriculum writer was added to the elementary staff during the summer of 1971. The writer communicated with the teachers as they planned and implemented new units, then the writer and the individual teacher developed the planning materials into the established unit format which was made available to all pilot teachers. These unit materials were also widely disseminated to other systems in Georgia, university classes and to

systems in other states. During the second year of the program, the curriculum writer and project teachers developed a total of thrity-four (34) career education unit guides.

During the 1971-72 school term, implementation of career education units continued at the same rate as the previous year with each teacher completing one (1) unit per grading period for a total of four (4) per year. The career development specialists continued to work with the project teachers in planning unit topics as well as assisting with implementation procedures. They continued helping the teachers obtain materials, but most of the mechanics of arranging resource persons and field trips were being handled by the individual teachers and school personnel.

In-service workshops were conducted throughout the year to keep the teachers informed of current happenings of career development in Cobb County and other systems.

The 1972-73 school year opened with all teachers in the four (4) pilot schools participating in the program. In addition to the school-wide participation in the pilot schools, expansion or "seed" teachers were selected by their principals at each of the thirty-four (34) remaining Cobb County schools. These "seed" teachers, along with pilot school teachers, were involved in a two (2) day summer workshop meeting and were given assistance throughout the year by members of the project staff.

The mechanics of the program continued much the same as in previous years. With the quarter system being introduced to the elementary grades in the 72-73 term, teachers continued to implement one (1) unit per grading period for a total of three (3) for the year. Teachers continued to receive assistance from the project staff in selecting and planning unit activities, but the major protion of the responsibilities of obtaining

materials, setting up field trips, procuring resource persons and other duties were handled by the individual teachers and their students.

Many different types of visitations were conducted into all project classes with out-of-state visitors continuing to be a major part of the visitation program. Teachers visited project classes in their own schools and in other County schools to exchange ideas and to share information. Members of the Cobb County Board of Education visited the elementary schools in the spring of 1973 to observe activities and to interact with principals, teachers and students.

The 1972-73 school year closed with the local Board's voting to expand the career education program by making career development activities a part of every elementary student's school experiences. This action assured support for the continuation of program activities by making the career development program an integral part of the Cobb County Instructional Department. Staff members concluded the year by making presentations and meeting with the principals and faculties of the expansion schools to provide orientation toward the career development approach. Principals were also involved in a special workshop session on career development as part of the County Principals' Conference in June.

Junior High Level (See Appendix B)

At the junior high level, the emphasis shifted from awareness and orientation to exploration and orientation. Teachers continued to use the unit approach, drawing upon more simulated work experiences and increased self-awareness as applied to exploratory work situations.

Seventh Grade

The seventh grade program, which actually was implemented

in 1971-72, utilized teams of four (4) teachers, each of whom made an input into the total unit development. Each of the math, science, social studies and language arts teachers demonstrated the practical application of his subject matter to the unit topic and showed its inter-relationship with the other subject areas. Depending upon the thrust of the unit, a different teacher assumed the lead role for the one (1) unit implemented each quarter. Assisted by the middle school specialist, the lead teacher helped coordinate the selection of a unit topic and the planning to implement it. A flexible, rotating block schedule which provided a two hour block of time for each subject area promoted effective team planning by teachers and facilitated planning for more indepth exploration with resource persons and on field trips.

Eighth Grade (P.E.C.E.)

On the eighth grade level, the P.E.C.E. (Program of Educational and Career Exploration) was incorporated into the Cobb County Occupational and Career Development Program. Not a direct off-shoot of the Career Development program, the Daniell P.E.C.E. program was part of a state-wide program developed by the Georgia State Department of Education. A P.E.C.E. coordinator, housed in the school, worked with the business, industrial and service areas of the community to identify sites for student exploration and study.

A quarter course, P.E.C.E. offered all eighth grade students the opportunity to explore and study ten (10) of the fifteen (15) occupational clusters identified by the United States Office of Education. One (1) week was devoted to each of the ten (10) clusters. As part of the students' learning experiences, they discussed each cluster with the coordinator prior to an on-site visit to an actual community work site identified under that particular cluster. At the work site, each student was allowed to

interact with a particular worker, experience the "hands-on" characteristics of his job and discuss the worker's feelings about the job, the characteristics, conditions and benefits, etc.

After the on-site visits, the coordinator led the class members in discussing their reactions to the visits, the things they observed and how they felt about them, the information gained from the on-site visits and other areas of interest to the students. In an effort to coordinate the activities of the P.E.C.E. program with the other learning experiences of the students involved, the P.E.C.E. coordinator met weekly with the other eighth grade teachers to keep them informed of the occupational clusters currently being covered. Teachers then related the subject matter skills and concepts being taught to the occupational cluster being explored in P.E.C.E.

Ninth Grade

Students at the ninth grade level made their first major decision in terms of course offerings, choosing among the three (3) broad career areas of Human Services, Business and Distribution and Industry and Construction. Each of these three (3) areas is a quarter course and is the result of the realignment of the former fields of Home Economics, Business Education and Industrial Arts. Based upon their previous exposure and experiences, students then selected one of these broad areas for exploration each quarter.

Instructors from these career areas, along with other subject matter teachers, met periodically with the career development specialist for team planning and for identifying specific ways that subject skills and concepts could be related to each other and to the three (3) broad career areas. The six (6) elements of the career development approach continued to be an integral part of the learning experiences of each student.

Secondary Level

Several different methods of implementing the career development approach have been utilized at Sprayberry High School during the three (3) years of the program. One approach tried during the 1971-72 school term involved the concept of interlocking in which the academic teachers were asked to relate their subject skills and concepts to the vocational offerings. Sprayberry's lack of a coordinated block schedule in which groups of students in the vocational courses shared the same academic teachers caused the failure of this approach. At mid-year, it was discarded and the subject-centered unit approach was introduced to the teachers. In the unit approach, teachers identified specific subject skills and concepts and related them to the students' career interest areas. All the teachers who tried this unit approach seemed to feel more comfortable with that method, with the result that more teachers became active program participants during the 1972-73 school year.

The secondary specialist and curriculum writer, who were added during the summer of 1971, worked regularly with the teachers to assist them in the selection of unit topics, in their relation of subject skills and concepts to the students' career interest areas; their obtaining of materials and scheduling of resource persons, etc.

Despite some of the problems inherent at the secondary level, (the strict subject matter orientation of the teachers, the dichotomy of the academic and vocational schools at the Sprayberry campus, the lack of firm administrative support, the inadequacy of course offerings at the vocational school, etc.) some progress was made in changing teacher attitudes and facilitating total student development. The in-service training provided the teachers during the course of the program introduced them to new methods and materials for use in making education more relevant to the

needs of their students. An exploratory program for tenth grade students, instituted during the second year of the program, gave the students additional exposure to the course offerings at the vocational school and aided their choosing programs and courses more suited to their needs. An in-school job placement program facilitated the students' obtaining full and part-time work in occupational areas of interest to them.

Community Involvement

Throughout the program -- from the initial conceptualization through the implementation, review and refinement phases -- members of the community have been involved in project activities. Interaction among business leaders, parents, school personnel, students, instructional staff members and career development staff members fostered open lines of communication and contributed greatly to the success of the program.

During the conceptualization phase of the project, community representatives served on an advisory committee which assisted the planning committee in assessing community needs and interests. Throughout the course of the program, PTA groups and other civic and service organizations were kept informed of the progress through staff presentations of various aspects of the program such as the elementary component, curriculum development and the placement service. Not only did these presentations help to foster effective communication between the schools and the community, but also they served to identify some tangible ways in which such organizations and individuals might contribute to school programs:

To encourage parents to visit the classroom to observe their children's activities; to encourage parents and business leaders to serve as resource persons; and to encourage business leaders and parents to provide field trip sites for students. Through the use of a questionnaire parents

were surveyed as to their potential involvement in school activities. Information was gathered and compiled into school resource guides that were of invaluable assistance to implementing teachers and students. Cobb County parents were also involved as participants in panel discussions at the Georgia Governor's Conference on Career Education in the fall of 1972. Parents also participated in interviews conducted by magazine and newspaper writers who were preparing articles on the program and were interested in getting the parents' viewpoints.

Probably the most outstanding single example of the community's involvement in the educational process is the Cobb County Youth Museum, a joint effort of the Marietta Junior Welfare League and the Youth Museum Guild. In planning and constructing the Youth Museum, the Welfare League and Museum Guild sought to complement the goals of the school system by providing exhibits and experiences that could not be readily duplicated in the school setting because of prohibitive costs and lack of space. As another goal, these community representatives wanted to preserve and present the cultural heritage of the Cobb Community.

The present theme "Careers in Cobb - A Century of Work," illustrated for the students through various exhibits and simulation activities, the growth of the County (occupational, social, economic, etc.) from the agrarian society of 1870 to the complex, industrialized, metropolitan society of the present.

Teachers on both elementary and junior high levels utilized the Youth Museum as a site for field trips throughout the year. The Museum is also open to the public on weekends.

Visitation (See Appendix C)

During the three (3) years of the project, numerous visiting educators and laymen from within the State of Georgia, from many other States and from several foreign countries were given a program presentation and/or a tour of project schools and the community Youth Museum. Curriculum and guidance materials were shared with the visitors, who in turn, exchanged materials and information with the Cobb County staff members and teachers.

Visitations to the program were arranged on a regular basis (one week per month) to give visitors the opportunity to observe the program in practice and to interact with participating principals, teachers and students. Principals, teachers and students benefitted from the interaction with visitors, while the regularly scheduled visits created only a minimum of disturbance for class schedules.

In-Service Development (See Appendix D)

As the Cobb County Occupational and Career Development Program progressed from the first year into the second year of operation, the need for a short, relevant and informative method of providing in-service orientation for new teachers and administrators became apparent. The realization of this need led to the formulation of an in-service workshop format that would provide practical help for the implementing educator.

Planned so that the teachers' questions of, "Where do I start? How do I implement the career education approach in my classroom?" are answered, the workshop format has evolved into an activity-centered program that involves teachers "role playing" as students while the workshop leaders direct the activities. Each participant is given an

in-service booklet which contains directions, supplementary test and a section of questions to be answered during the workshop.

The workshop opens with a slide presentation which serves as a program orientation and gives workshop participants a look at learning activities and experiences of other teachers. Following the orientation participants are given an extensive review of the six (6) elements outlined in the slide presentation; an introduction to useful media materials and audio/visual equipment; and an identification and explanation of common hand tools and their uses. This section of the in-service program is handled on a "station-to-station" basis, with participants moving from one (1) station to another until they have been in all three (3). During this station-to-station activity, participants are given an opportunity to discuss answers to questions outlined in the workshop booklet and to make notes for future reference.

Following the orientation and station-to-station activities is the unit planning and implementation phase. In this phase, participants, working in grade level or subject area groups, role play through a unit activity as students. All six (6) elements are keyed to the chosen unit topic to give participants actual experience in working with the components of the career development approach. This actual experience serves as a basis upon which teachers may draw when they return to their classrooms to initiate units in their own school settings.

Following the unit implementation activities, participants are involved in a unit development phase in which they work individually or in small groups, to record specifics of unit topics, activities, methods and materials. These notes are incorporated into a rough unit outline for the teacher's use when implementing units in the classroom. Throughout

the in-service, staff members stress the importance of the career development approach as a means of covering appropriate subject matter skills and concepts. This stress on correlating career development activities with the regular curriculum continues during the unit development phase, with the participants being encouraged to key their unit topics and activities directly to the subject skills and concepts they teach.

A sharing session in which workshop leaders and participants interact to answer questions, relate experiences and give suggestions is the culminating activity of the in-service program.

This type of workshop may be carried out in either one (1) or two (2) days with two (2) days being the optimum time period. Utilized extensively in teacher and counselor workshops in Cobb County, throughout the State of Georgia and in many other states, this workshop format has proven to be an effective means of introducing new participants to the elements and methods of the career development approach.

Unit Description and Development (See Appendix E)

As a means of "packaging" the results of classroom career education activities, the resource unit format was developed. Included in the unit format were goals and behavioral objectives; concepts; subject terminology and information; suggested subject area activities and techniques; evaluation methods and bibliographies, all centered around a particular career area. Developed for a particular grade level and based upon the learning experiences of students and teachers, the unit was keyed directly to appropriate grade level subject matter concepts.

The staff curriculum writers worked with teachers at all grade levels in collecting information to organize into the unit format. In developing units based on classroom activities, the writers used several different techniques of gathering information to put into the transportable format. As one technique, staff writers worked with teachers prior to the actual initiation of the unit to set directions, outline possible subject matter activities, identify needed materials and to suggest plans for possible field trips and resource persons. During the course of the unit, writers met with implementing teachers to record notes which were later compiled into the unit format.

Another technique of unit development involved the writer's working with the teacher after the completion of the unit activities to record notes of ideas, activities and results of student participation. These notes were then compiled into the format. In some instances, the staff writers prepared a rough outline for the implementing teacher's use. This rough outline, supplemented with additional activities and information, served as the basis for the revised unit.

Approximately eighty-five (85) activity-centered resource units, from grades 1 to 12, were developed in the Cobb County Occupational and Career Development Program format. Copies of these curriculum materials were reproduced and distributed to teachers through their school media centers. Teachers were encouraged to use the resource units as guides in planning and implementing similar classroom units. These units were also widely disseminated to other systems in Georgia, university classes, the State Department of Education, and systems and state agencies in other states.

Plans were made to code the completed unit materials into the Cobb County Schools Curriculum Guides at appropriate points where the particular career development units enhance subject matter skills and concepts. The task of keying the units to the appropriate points in the curriculum guides should be accomplished by the end of the summer, 1973.

Other Materials (See Appendix F)

Cobb County Occupational and Career Development Program staff members collaborated on the development of many different types of written materials and audio/visual aids for use in various program activities such as orientation, dissemination, in-service development, placement and evaluation. Other Cobb County Instructional Staff Members prepared materials in particular areas such as guidance and counseling that were utilized and disseminated by the Program.

Results and Accomplishments

The project showed profound success in accomplishing goals at the elementary level, measurable success at the junior high level and considerable success at the secondary level (with limited participation.)

Dissemination of project activities and materials was widespread.

Evaluation

The Cobb County Board of Education, Marietta, Georgia (prime contractor) issued a subcontract to the Center for Occupational Education, North Carolina State University at Raleigh, for the purpose of conducting an evaluation of the project entitled "Cobb County Occupational and Career Development Program," pursuant to the provisions of Contract No. OEG-0-70-4781 (361) of the U. S. Office of Education.

This subcontract shall be in force for the duration of the project for three (3) years beginning 1 July 1970, and ending 30 June 1973, by the U. S. Office of Education or by the Cobb County Board of Education. In the event of termination by the U. S. Office of Education or by the Cobb County Board of Education, this subcontract shall be terminated upon written notice from the prime contractor to the subcontractor. Except in case of termination under the conditions specified above, this subcontract shall be continued annually for the duration of the project by an addendum to this document, said addendum to include an annual budget and description of services. In the event that the sbucontract is terminated, the subcontractor will render a final report on the current status of the project within thirty (30) days after the termination of the annual subcontract term.

The evaluation subcontracted is conducted under the direction of Dr. Robert L. Morgan, Research Assistant, Center for Occupational Education, North Carolina State University at Raleigh and under the direction of Mr. Joel Smith, Project Director. The Project Officer is Mrs. Joyce Dechman Cook, Program Officer, Pilot and Demonstration Branch, Division of Vocational and Technical Education, Bureau of Adult, Vocational, and Technical Education, U. S. Office of Education. Changes in the subcontract director are subject to the approval of the Project Director. Revisions to the contract terms and conditions may be made only by the Contracting Officer within the limits of his authority.

The subcontractor agreed to conduct the evaluation in accordance with the previsions of the proposal entitled "A Developmental Program of Occupational Education," subsequently re-titled "Cobb County

Occupational and Career Development Program," upon which Contract No. OEG-0-70-4781 (361) is based an in accordance with goals and objectives subsequently submitted, both of which were made a part of the subcontract.

The major responsibilities of the subcontractor (Center for Occupational Education, North Carolina State University at Raleigh) are:

1. To provide personnel to design and coordinate the evaluation in accordance with the provisions stated above.
2. To provide all basic materials for data collection.
3. To select existing instruments and develop new instruments needed to fulfill the data collection requirements.
4. To provide scoring services and data analysis services which constitute a part of the evaluation design.
5. To provide on-location consultative services relevant to the design, conduct, and interpretation of the evaluation, as the University deems necessary to discharge its responsibility.
6. To submit a interim report to the prime contractor based on the period of time covered by this subcontract.
7. To submit a final report covering the entire project evaluation at the termination of the project.

Policies and guidelines issued by the U. S. Office of Education with regard to interim and final reports shall be followed in submitting interim and final reports.

Conclusions and Recommendations

Career Development is a sequential process that is facilitated by career education which is transportable as a program. Efforts will be intensified at the upper grade levels as more students move into the upper levels after having experienced the exploratory and awareness phases.

Career education must be an integral part of a system's on-going curriculum and must ultimately become the joint responsibility of all involved in its implementation -- teachers, administrators, counselors, central staff supervisors, parents and the business community.

BODY

Career Education - The Need

In the United States, in 1972, and in the midst of the most affluent and advanced technological society in the history of the world, there is increasing unemployment, there is under-employment, there is abject poverty and widespread social unrest. Educators have promised alleviation of such problems through sophisticated, highly specialized and "maximum years" education.

The problems have not been solved, but indeed have continued to grow with increasing population, increasing leisure time and an accelerating rate of change in every facet of American life. This is not to say that education has no place in dealing with such problems -- education's role is direct and indirect, requested and required, immediate and distant -- IF the educational program is socially relevant, personally meaningful and fulfilling to the individual.

Such a program effort is Career Education, which is based upon the premise that education is the responsibility of the school, the home and the community; that learning experiences should be activity-centered as well as sedentary; that decision-making ability comes from decision-making practice; that subject matter concepts are important only as they help a student function in his environment; that feelings precede actions and that students are encouraged, assisted and enabled to consider

alternatives in choosing occupational aspirations, educational pursuits and other activities toward personal fulfillment.

Problem Area

The great majority of our students will enter employment at some time during their lives. Consequently, they need to be able to make informed and satisfying decisions which contribute to a successful transition from school to work. They also need some specific skills which are in demand. Given the wide range of abilities among students and the almost infinite number of occupational opportunities open to them in a yet unknown future, developing educational programs to prepare them to enter work successfully is a tremendous challenge. To meet this challenge I feel that we need a Career Development emphasis from kindergarten through the post-secondary level.

Career Development is broader than vocational training. A Career Development emphasis is one which recongizes the interrelatedness of all aspects of the school curriculum.

It has long been an accepted conclusion in many school systems that students fall into one of two (2) categories. One (1) category includes college bound high school students who expect their careers to begin some time in the early twenties. The second category includes the "vocational student" who must be prepared to enter gainful employment upon graduation from high school. Unfortunately it is also a generally accepted principle that these categories involve uniquely different kinds of people; therefore, some where along the way, each individual must decide, or have a decision made for him, as to the category for which he is suited.

For the college bound student the curriculum considered appropriate has been heavily laden with science and mathematics with generous helpings of foreign languages and other advanced academic courses. For the vocational student the appropriate curriculum has traditionally included only the required academic courses with ample time spent in a variety of shop or industrial arts experiences.

There appear to be several reasons for reservation relative to this approach as a school system strives to meet its goal of helping all students to make a successful transition from school to work. Perhaps the first question that emerges concerns the kinds of college opportunities available for the student who selects the vocationally oriented curriculum in high schools. A second question, one related to the first, is "What occupational opportunities are available for the college bound student who never makes it to college or who withdraws after his college entrance?" A third question that arises relative to this educational approach has to do with the stigma that is sometimes attached to vocational programs in the schools. This stigma often causes students to shun these programs even though they are individually appropriate and adequate. A fourth question that challenges educators in this area has to do with the individual right of every student to select the course of study he wishes to pursue and the responsibility of the school to advise the student through presenting alternatives for his selection. These and many other questions present a complex situation that must be considered by educators as they attempt to create Career Development Programs.

Existing programs of occupational preparation, for the most part, have been designed to prepare students for entrance into gainful employment

upon their graduation from high school. At the present time these programs in our schools are generally limited to the eleventh and twelfth grades in our secondary schools. However, the number of required courses for graduation has been lowered; a quarter system has been instituted; both of which allow considerably greater flexibility in students' selecting courses toward personal fulfillment. These programs are implemented through the Instructional Division of the school system and are under the leadership of the coordinator of vocational education. There are four (4) distinct programs presently in operation in the Cobb County Public Schools. These programs include:

1. Business Education
2. Trade and Industrial Education
3. Cooperative Work-Study Programs (D.C.T., D.E., V.O.T.)
4. Consumer and Home Making Education

The Business Education Program is presently in operation in all of our nine (9) high schools. This program generally includes typing, shorthand, bookkeeping, business machines, Business English, and business mathematics. There are at this time twenty-nine (29) full time instructors serving 2,747 students in Business Education.

The Trade and Industrial Education Program is centered at the Cobb County Vocational High School located on the campus of Sprayberry High School. Students who participate in this program are enrolled in one (1) of our nine (9) high schools and attend the Vocational High School for three (3) hours each school day. Students from each of our high schools participate in the Trade and Industrial Education Program. Transportation for these students is provided by the school system. Students may enroll in one (1) or six (6) specialized courses at the Vocational High School.

These courses include electricity which presently has an enrollment of forty-one (41) students, graphic arts and printing with an enrollment of forty (40), drafting with an enrollment of thirty-five (35), sheet metal which now involves thirty-two (32) students, and data processing with an enrollment of forty (40). The Vocational High School is administered by a full time supervisor and has a staff of six (6) instructors and one (1) counselor. Students are admitted to the program after the completion of their second year in high school and are graduated from their parent high school upon completion of their vocational program and required academic courses.

Our Cooperative Work-Study Programs are presently operating in six (6) of our nine (9) high schools. These programs include classroom instruction in the specific jobs for which the students are training plus actual on-the-job work experience for which the students receive a grade and earn a salary. The Diversified Cooperative Training (D.C.T.) Program is now in operation at Pebblebrook, South Cobb and Wills High Schools with one hundred eighteen (118) students participating. This program is designed to prepare students for employment in trades, industrial positions, and service positions. The Distributive Education (D.E.) Program is presently under way at Wills, South Cobb, Osborne and Campbell High Schools. Preparation is provided in this program for the distribution and marketing of goods. One hundred seventy (170) students are enrolled in our D.E. Programs. Vocational Office Training (V.O.T.) is in operation at Campbell, Sprayberry, Wills, South Cobb, and Pebblebrook High Schools. This program presently involves one hundred forty (140) students. Through the Vocational Office Training Program students are prepared for office and clerical positions. Cobb County's

V.O.T. Program is unique in the state of Georgia in that it includes training for jobs in data processing. Students at Wills, Sprayberry, South Cobb, and Pebblebrook High Schools may enroll in key punching and courses in the use of data processing equipment.

All of our high schools and three (3) of our junior high schools presently offer a Consumer and Home Making Education Program. It is specifically intended to offer preparation in home management. Obviously most of the participants in the program are girls; however, a few boys are enrolled. There are at this time fourteen (14) instructors in the program with 1,333 students.

In addition to these four (4) basic occupational preparation programs, we also have one (1) broader Career Development Program. It is one of fifty-two (52) pilot programs in Georgia this year and is entitled Program for Education and Career Exploration (P.E.C.E.) It is a middle school program which includes classroom instruction in career and occupational decision-making as well as extensive concrete experience and field trips to businesses and industries throughout the area. The program is funded at Daniell, Osborne and Nash Junior High Schools.

We also have the Marietta-Cobb Area Vocational-Technical School; it is under the administration of the Marietta City School System, but our system shares the local costs equally with Marietta. Many of our students attend there after finishing high school. Those who finish their academic requirements in three (3) years may spend their entire senior year in the vocational-technical school and then graduate from their parent high school in our system. Some students take advantage of this option, however the Area Vocational-Technical School is basically post-secondary.

We also have Southern Technical Institute, a branch of Georgia Institute of Technology, which offers two (2) year engineering technology programs.

This then provides a concise pictorial description of vocational education in our school system. We believe the total program as now established represents a sound beginning. However, we are convinced that we must expand and re-evaluate what we are doing in terms of a realistic assessment of the needs of our students and/or our previously stated objective of preparing all students to enter work successfully.

Objective

The primary objective of the project is to plan and implement a developmental program of occupational education in a cluster of schools within the Cobb County School System. The approach will be to fuse the more promising program and practices of Vocational Education with the broader school curriculum and with the guidance program of the school system within the elementary, middle, and secondary schools to enable the system to achieve its objective of education to all its students in developing work skills that are suited to an area of rapid growth in population, industry and technology. The project will place special emphasis on those who are culturally, economically or otherwise handicapped or disadvantaged.

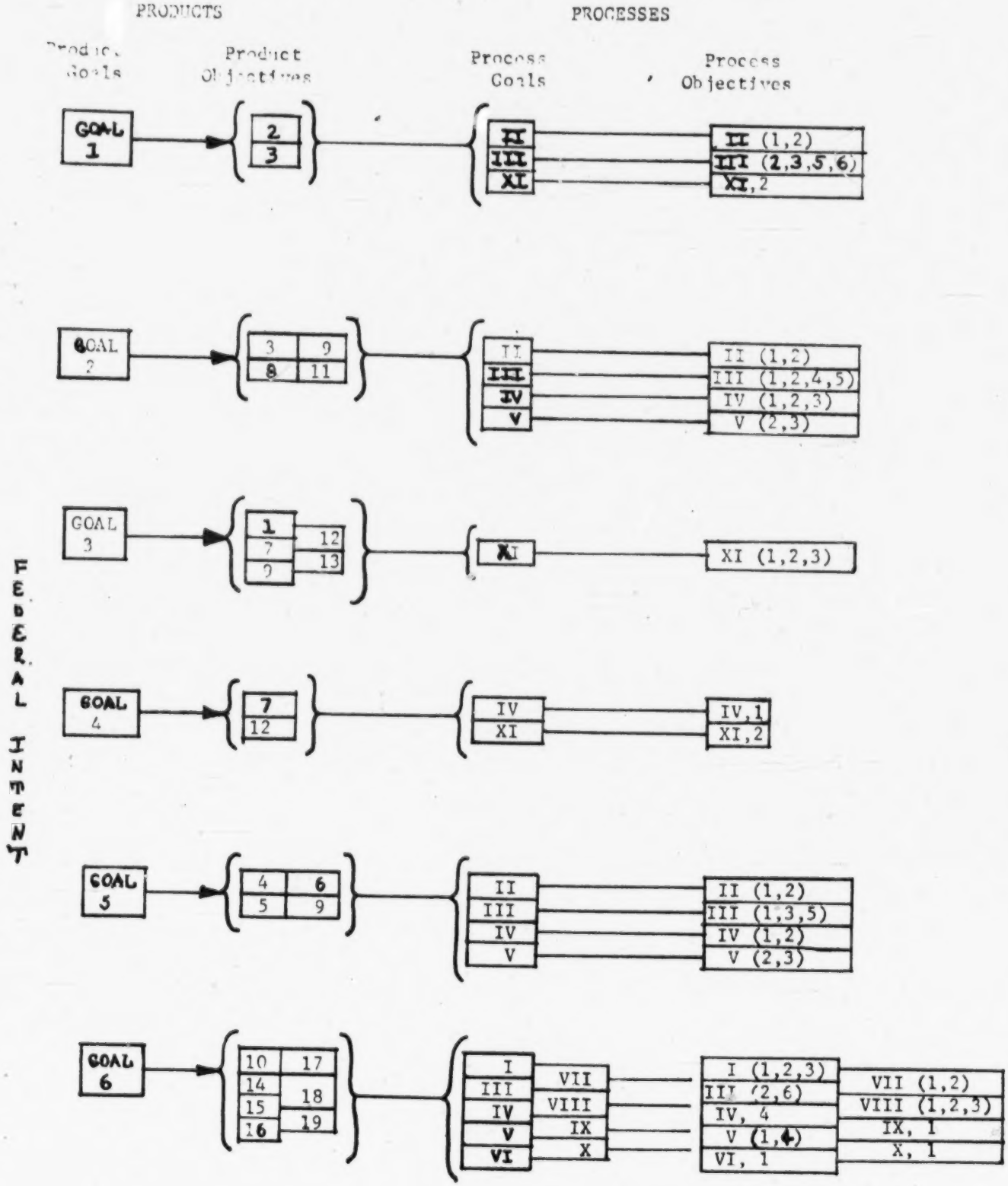


Figure 2

Relationship Between Goals and Objectives

PRODUCT GOALS

Product Goal I:

The student will develop an awareness of his individual self-characteristics (interest, values, abilities, personality traits) and the relationship between these characteristics and the characteristics of various occupations in the community.

Product Goal II:

The student will acquire an awareness of the occupational areas within the community, the characteristics and the contributions of each, and will extrapolate to build a frame of reference for occupational areas in the state and nation.

Product Goal III:

The student will acquire an awareness of educational avenues necessary and those available relative to a wide range of occupational areas.

Product Goal IV:

The student will build upon his awareness of self-characteristics, occupational areas, educational avenues, activity oriented experiences, and upon decision-making practice, an ability for decision-making.

Product Goal V:

The student will acquire an awareness of the psychological and sociological meaning of work, and during his school activities will express a positive attitude toward self, others, educational programs, and different types of work roles.

Product Goal VI:

To provide a more meaningful and productive educational program for students identified as disadvantaged and/or handicapped.

PRODUCT OBJECTIVES

Product Objective I:

To increase student (grades 5-12) knowledge of the educational requirements of occupations as measured by the P.E.C.E. Knowledge Test.

Product Objective II:

To increase student (grades 5-12) knowledge of the abilities required in different occupations as measured by the P.E.C.E. Knowledge Test.

Product Objective III:

To increase student (grades 5-12) knowledge of occupational areas as measured by the P.E.C.E. Knowledge Test.

Product Objective IV:

To increase the student's expression of positive attitudes toward self and others.

Product Objective V:

To increase the positiveness of student (grades 4-12), parent and teacher attitude toward education as measured by attitude scales.

Product Objective VI:

To increase the percentage of students applying for and entering post-secondary education.

Product Objective VII:

To increase the number of occupations students (grades 3-12) can list in two (2) minutes.

Product Objective VIII:

To increase the number of high school students enrolled in vocational education programs.

Product Objective IX:

To decrease the absentee rate.

Product Objective X:

To increase the number of students (grades 10-12) in work experience or in part-time jobs.

Product Objective XI:

To increase counselor involvement with students (grades 7-12).

Product Objective XII:

To increase counselor involvement with teachers to fuse career-oriented activities and information in curriculum presentation.

Product Objective XIII:

To increase parental involvement in the educational process.

Product Objective XIV:

To increase the proportion of students (graduates and dropouts) leaving school with job entry-level skills.

Product Objective XV:

To maintain student academic achievement as measured by an achievement test.

Product Objective XVI:

To reduce the dropout rate.

PROCESS GOALS

Process Goal I:

This program in grades 1 through 7 will enhance the traditional academic curriculum with occupationally oriented activities.

Process Goal II:

This program in grades 1 through 7 will introduce students to community work roles.

Process Goal III:

This program will incorporate the P.E.C.E. Program at the eighth grade level in such a manner as to enhance traditional academic learning and occupational exploration.

Process Goal IV:

This program will develop and implement programs of pre-vocational orientation into the middle school, ninth grade, in such a manner as to enhance traditional academic learning.

Process Goal V:

This program will develop and implement an exploration program at the tenth grade level.

Process Goal VI:

This program will provide an across-the-board work experience program at the tenth grade level for potential dropouts.

Process Goal VII:

At the ninth grade, teachers will utilize exploration, pre-vocational and career development methods in conjunction with academic curriculum.

Process Goal VIII:

At the secondary level, teachers will utilize a unit approach that is student-centered, draws upon specific subject matter concepts and is preparatory in nature.

Process Goal IX:

This program will develop a placement program thru which the school will help each student to plan and execute steps toward individual career goals.

Process Goal X:

This program will provide both direct and indirect assistance to students in the career development process. Direct assistance will be through regularly scheduled individual counseling and group guidance activities. Indirect assistance will be provided through management of school and community resources to facilitate career development.

PROCESS OBJECTIVES

Process Objectives I:

1. Each teacher will implement at least one (1) activity centered resource unit per grading period.

2. Each teacher will self-evaluate each unit implemented and submit a report of successes, failures, and suggestions for further development of that unit.

3. Each teacher will work directly with the Career Development Specialists in the implementation of the units.

Process Objectives II:

1. Each class will take at least two (2) field trips per year to an on-the-job site.

2. Each teacher will have at least two (2) community resource persons per grading period into her classroom to discuss their work roles with students.

Process Objectives III:

1. The student will be exposed to the actual work settings of all levels within job clusters.

2. The student will perform aspects of the observed jobs that are appropriate in terms of skills and abilities.

3. The student will interview workers in order that he may know how various workers view their jobs.

4. The students will discuss their visitations and will extrapolate information obtained to additional occupational possibilities.

5. Same as II, 2.

6. Each teacher in grades 10 through 12 will provide one (1) unit with supporting lesson plans per quarter designed to help students see the relationship between her subject matter and a cross-section of occupations.

Process Objectives IV:

1. At the ninth grade level, the student will participate in some combination of the three (3) broad areas of occupations: (a) Business and Distribution, (b) Human Services, and (c) Industry and Trade (based on Construction and Production), and will be exposed in depth to those aspects of each level that will further broaden the experience base for selecting more specific occupations.

2. Same as III, 2.

3. Same as II, 2.

4. Same as III, 6.

Process Objectives V:

1. The student will choose those quarter courses that are appropriate to his personal career aspirations.

2. The student will be exposed to fifteen (15) hours during a quarter to the conditions, characteristics, and other details of various occupations within the community.

3. Same as II, 2.

4. Same as III, 6.

Process Objective VI:

1. The student identified as a potential dropout will receive special training in consumer education and job skills one (1) hour each day under a Coordinator of Vocational-Academic Education and if so inclined will be placed in after school jobs, with coordinator-employer liaison for direction and follow-up.

Process Objectives VII:

1. Ninth grade academic teachers will meet with pre-vocational instructors to develop one (1) unit per grading period.

2. During their planning periods, teachers will report results of unit implementation and make suggestions for improvement.

3. Students will be interviewed for their views of the interlocking.

Process Objective VIII:

1. The student will be provided opportunities of academic offerings at the senior high school for college preparation, vocational offerings at the vocational high school, on-the-job work experience in the community or the senior plan of the specific training at the area technical school.

Process Objective IX:

1. The Placement Program will establish channels of communication between the school and the community world of work utilizing resources of business placement offices, the local labor department, the Chamber of Commerce, and any other manpower agency in the area.

Process Objectives X:

1. Classroom teachers at the elementary level will be assisted in building into the existing curriculum experiences to provide maximum opportunity for self awareness and awareness of the world of work.

2. At the middle and secondary levels counselors will, on a systematic and scheduled basis, work directly with students in individual and group counseling sessions to accomplish career development objectives. The counselor will also work on a scheduled basis to accomplish these goals through teachers, peer group, and community resources. At the middle school level the counselor will use classroom unit, community on-site, and pre-vocational laboratory experiences as a basis for counseling students toward career development objectives.

3. Special efforts will be made by the counselors to assist the non-college bound student in the transition to either enter employment or a post-secondary vocational program.

GENERAL DESIGN

I. OVERVIEW

The overall objective of this project is to plan and implement a developmental program of occupational education in a cluster of schools within the Cobb County School System. The approach will be to fuse the more promising programs and practices of vocational education with the broader curriculum and with the guidance program of the school system within the elementary, middle, and secondary schools to enable the system to achieve its objective of education to all its students in developing work skills that are suited to an area of rapid growth in population, industry and technology.

The procedures provide for a systematic approach in the further conceptualization, implementation, modification, evaluation and dissemination of the model. The program design will consist of these phases: (1) developmental; (2) implementation, review, revision and improvement; and (3) final implementation, evaluation, and dissemination.

A. Developmental phase: September, 1969 - August, 1970

The intent of the developmental phase will be to:

(1) Identify career development objectives at elementary, middle school and secondary levels as derived from student and societal needs.

(2) Review and assess existing research, resources, approaches and technology within and outside the Cobb County School System in the selection of process and a plan for executing the processes for accomplishing identified career development objectives in a cluster of schools (1 Sr. high school, fed by 1 middle school, and 4 elementary schools).

This phase will consist of two sub-phases as follows:

*1. Planning and consultant sub-phase:

The planning and consultant sub-phase will run from September, 1969 through May 1970. The intent of this sub-phase will be to specify objectives and to review, assess existing resources and approaches and make recommendations regarding implementation strategies.

Description of Activities

a. Conduct meeting of project Advisory Committee (November, 1969) to provide for a review of the project, its intent, and proposed procedures and to provide for additional input and modification.

b. Conduct working meeting (November, 1969) with selected consultant to provide them with an orientation in the preparation of the following working papers:

"Program Design for Career Development K-6"

"Program Design for Educational and Career Exploration in the Middle School"

"The Industrial Arts Prevocational Program"

"The Organization and Business Prevocational Program"

"The Human Services Prevocational Program"

"Structuring the Vocational Curriculum on the Cluster Basis in Grades 10-12"

"Job Placement and Post-Secondary Vocational School Placement"

"Guidance as an Integral Part of Career Development at Different Age Levels"

"The Nature of the Learner at Different Age Levels"

*This sub-phase will be conducted by previous grant.

Each working paper will contain the following break-down:

(1.) Conceptual Frame of Reference (General Description of Program)
(2.) Rationale (Why is program needed?)
(3.) Details of Program (Specific Operational Details)
(4.) Implementation Suggestions
  (a.) Principles
  (b.) Tasks to be Accomplished
    1. Short-range (before September, 1970)
    2. Long-range (during 1970-71 school year)

c. Conduct planning conference (January, 1970) at which consultants present working papers to key individuals from the Cobb County School System and from the cluster of schools involved in the project, and to provide a dialogue between conference participants and consultants.

d. Conduct meetings of each different sub-committee (January, 1970 through May, 1970) for the purpose of modifying consultants' working papers into a written "workable model" and "plans" for implementing the models so as to accomplish identified career development objectives. There will be six sub-committees in the following areas which will be composed of individuals from participating schools, consultants, state level, teacher education, etc.

e. Conduct monthly meetings of Executive Committee to review previous month's activities and to plan further activities. (This activity will be carried on through the project but will not be mentioned again.)

2. Staff and material preparation sub-phase: Summer, 1970

The staff and materials sub-phase will run from June 1, 1970 through August 31, 1970. The intent of this sub-phase will be to prepare the staff in the pilot attendance area and to develop and obtain support materials for implementation of the models developed by different sub-committees as part of the planning and consultant sub-phase.

Description of Activities

a. Complete selection and have on the job by July 1, 1970, the project director and other staff within cluster of school who are to work with the project.

b. Conduct seven-day training session for project director and key staff members in the pilot schools for the purpose of orienting the staff to the immediate and far reaching intent of the project to the theoretical concepts underlying the project, to the precedural intent, and to assist in the development of plans including time schedule, communication pattern, responsibilities, curriculum formats, etc. necessary for successfully implementing proposed process. One day of each week from July 1 through August 31 will be devoted to this effort. The Associate State Director of Vocational Education will take the lead for these sessions.

c. Conduct eight-day joint training session for project staff principals from pilot schools, elementary teachers, middle school teachers and senior high teachers. This training session will be for the purpose of orienting staff to intent and nature of the model at different levels; assess curriculum materials and to develop curriculum materials for implementing the model and schedule activities into the curriculum, to develop a procedure for reviewing the project's progress and to modify as needed within the context of each school and within the context of the total project. Consultants will be identified to assist project staff in these training sessions.

d. Utilization will be made of other teacher in-service institutes going in the state that would prepare staff for the project. Each of these institutes will provide specific inputs concerning disadvantaged and handicapped students. The following can be identified.

(1.) The PECE co-ordinator will be enrolled in a special institute to train such individuals.

(2.) The area high school supervisor will be enrolled in a special institute that will be devoted to the major concepts that underlie this project.

(3.) The area high school instructor will attend a summer institute to acquire confidence in those areas within a cluster where they are weak.

(4.) Several of these persons may be handled on an individual basis.

(Available in-service programs will be utilized throughout the duration of the project.)

B. Implementation, review, revision and improvement phase - September, 1970 - May, 1972.

This phase provides for implementation, continuous evaluation and modification of the process for accomplishing identified career development objectives within the aforementioned cluster of schools. This phase will consist of three sub-phases as follows:

1. Initial Implementation sub-phase (August, 1970 - May, 1971)

The aim of this sub-phase is to implement the model as conceived and assess its effect on students. This will necessitate constant review and follow-up in order to overcome problems that may emerge in order to implement the model as developed.

Description of Activities

a. Project director conducts weekly meetings with team coordinators* and principal from each school. This will serve as a monitoring procedure and more specifically (1) to review problems that are emerging and to plan to overcome; (2) to plan, organize and schedule future activities of team coordinators in their particular school; (3) to show ideas and experiences; (4) to review and study available materials and techniques; (5) to learn from experts; (6) to plan and co-ordinate both process and product evaluation. (This activity will not be mentioned again, but it will be continuous through the project.)

b. Team coordinators in each school conduct weekly meetings for staff which will be for the following purposes: (1) to interlock academic and vocational curriculum experiences; (2) plan and schedule activities; (3) develop curriculum materials; (4) assess existing curriculum materials and techniques available through ERIC and other sources; (5) staff utilization; (6) plan and conduct both process and product evaluation; (7) plan and conduct in-service activities; (8) develop a format that each will use in detailing learning activities carried out.
(This activity will not be mentioned again, but it will be continuous throughout the project.)

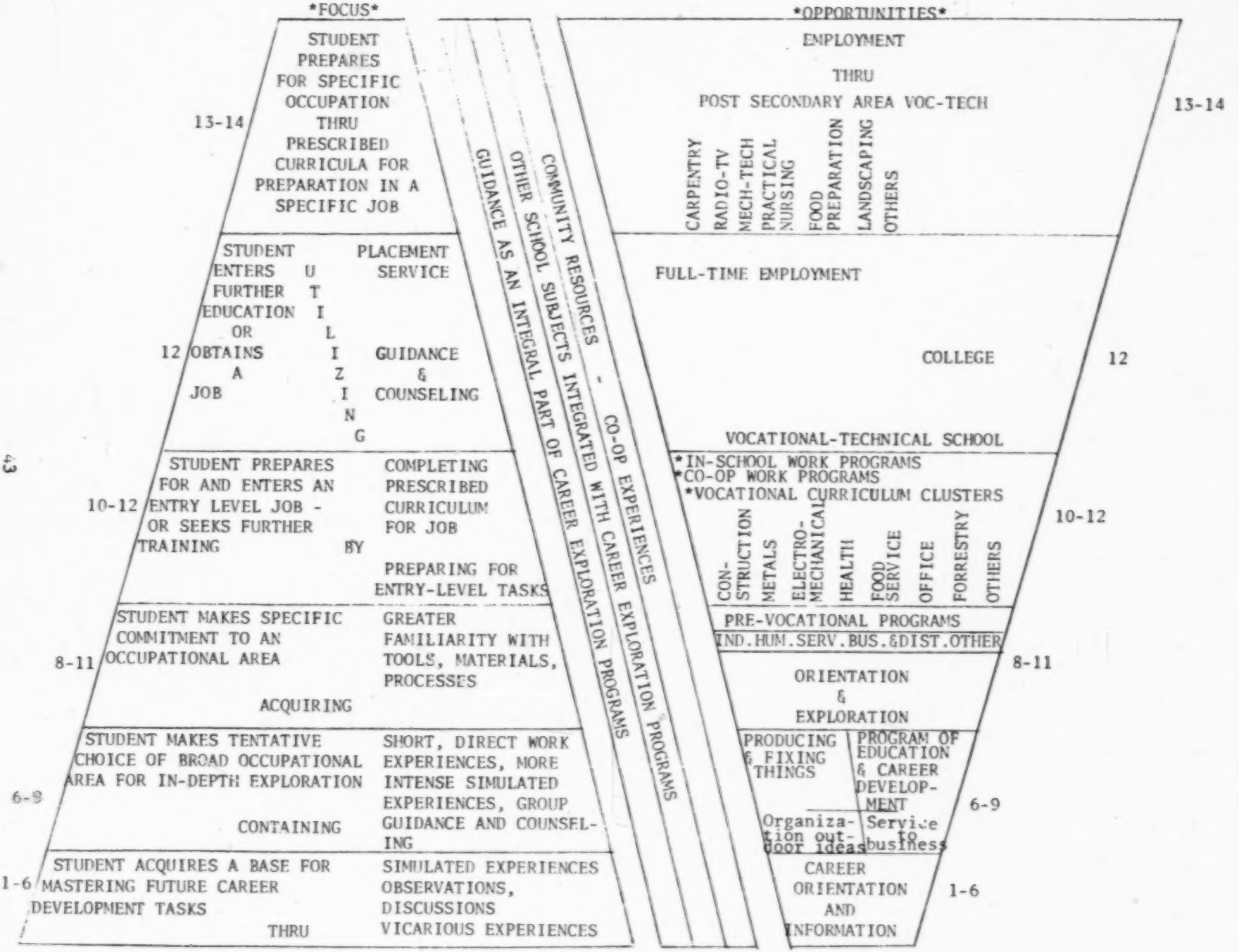
*Team coordinators include career development specialist at elementary level and job placement and post-secondary coordinator.

c. Conduct five-day project-wide in-service training for project staff team coordinators, teachers, and principals, to be scattered throughout the year and designed to add knowledge, ideas, and techniques that could be used to further develop the project. (This activity will not be mentioned again, but it will be continued throughout the project.)

d. All involved teachers will keep a daily diary with comments on process evaluations to be summarized weekly and used as a basis for revision the following summer. (This activity will not be mentioned again, but it will be continuous throughout the project.)

e. Conduct review of the project by an outside Advisory Committee. This will be made in the spring of each year. This Advisory Committee will be composed of individuals from the U. S. Office of Education, State Department of Education, local school level, teacher education and community.

f. Conduct product evaluation to determine the effects the project is having on students.



* A PROGRAM OF DEVELOPMENTAL OCCUPATIONAL EDUCATION *

Schools and Locations

The schools that participated in this project were those located in the Sprayberry attendance area. This attendance area consisted of one (1) senior high, (Sprayberry) one (1) junior high, (J. J. Daniell) and four (4) elementary schools. (Bells Ferry, Blackwell, Elizabeth, and Mountain View) During the third year of the project, teachers at other county elementary and junior high schools were involved in program activities as part of an expansion plan.

School Personnel involved in the project were as follows:

Elementary Level: All principals, twenty-four (24) teachers for the first year; all principals and forty-eight (48) teachers the second year; and all principals and teachers the third year. The last year of the program, approximately 155 teachers in both pilot and expansion schools were active program participants.

Junior High Level: Principal, three (3) counselors and ten (10) teachers for the first year; principal, three (3) counselors and fifteen (15) teachers for the second year; and principal, three (3) counselors and twenty (20) teachers for the third year.

Senior High Level: Principal, three (3) counselors and ten (10) teachers for the first year; principal, three (3) counselors and fifteen (15) teachers for the second year; and principal, three (3) counselors and twenty (20) teachers for the third year. In addition, the Vocational Supervisor, counselors and five (5) instructors of the Cobb County Vocational High School for each of the three (3) years.

Criteria used for the selection of the Sprayberry attendance area were:

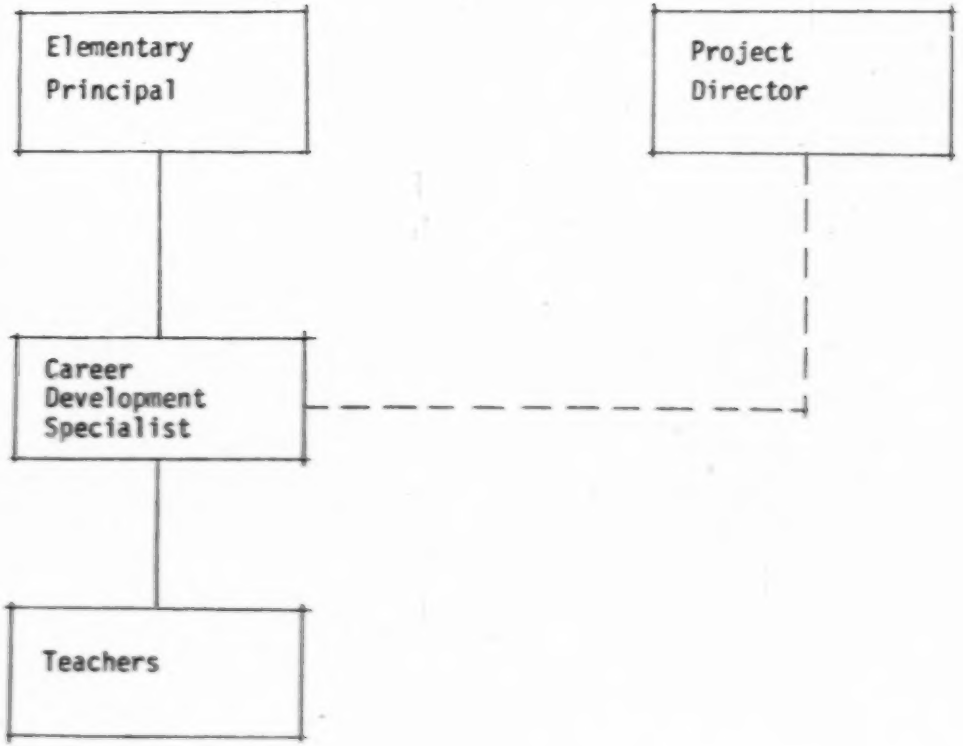
(1) The Cobb County Vocational High School was located adjacent to Sprayberry High School.

(2) Each of the elementary principals was an outstanding administrator and proven to be receptive to innovation and change.

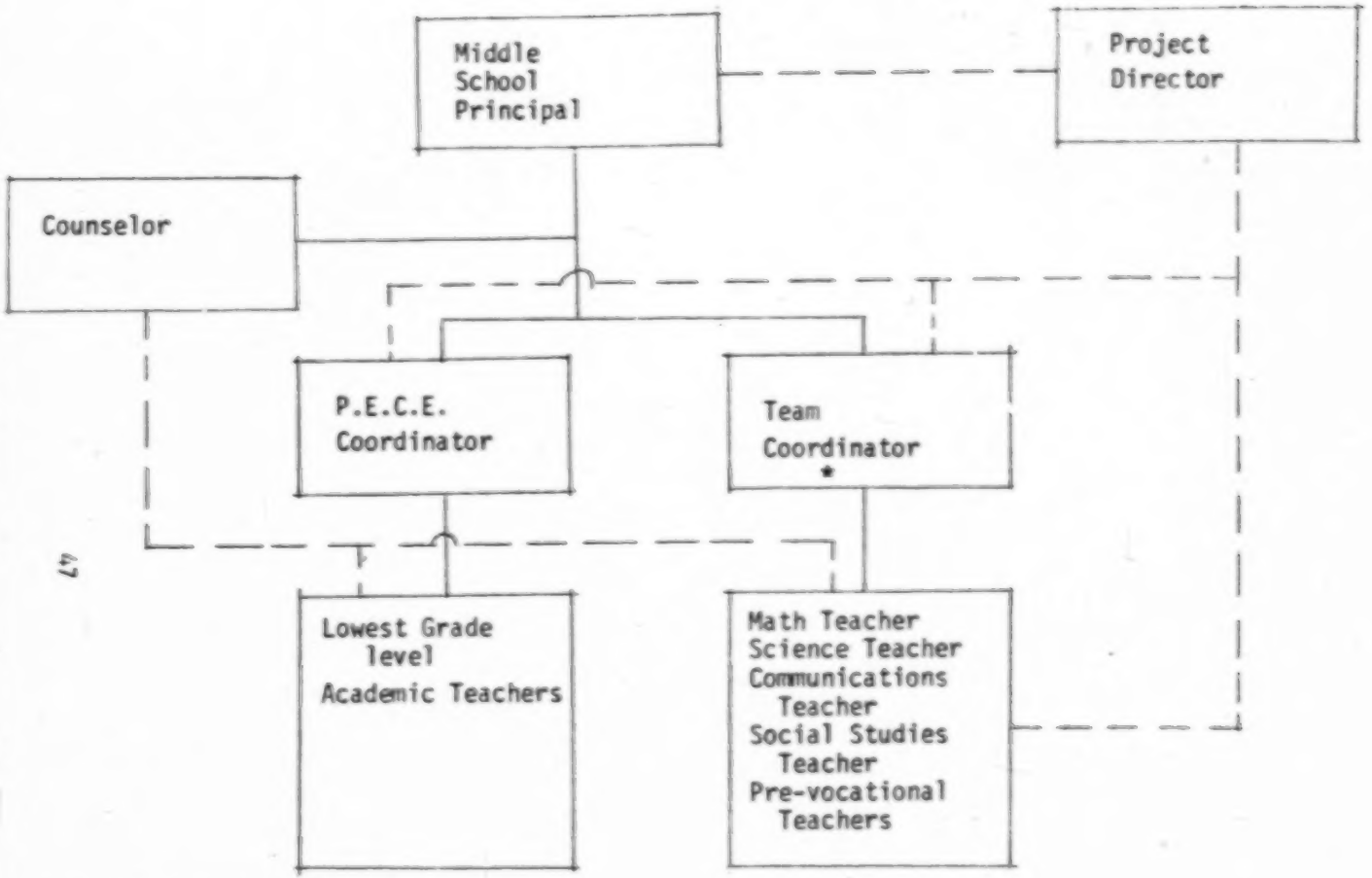
(3) The attendance area represented a realistic cross-section of Cobb County students.

(4) The junior high principal involved was recognized as a leader among his peers and had orientation toward vocational education in his background.

Total enrollment in the Cobb School System as of September, 1970, was 43,892. Ending enrollment in May, 1973 was 45,491. 1970 opening enrollment in the Sprayberry attendance area was 5,141 and closing enrollment in 1973 was 6,102.



ELEMENTARY
TYPICAL
EACH SCHOOL

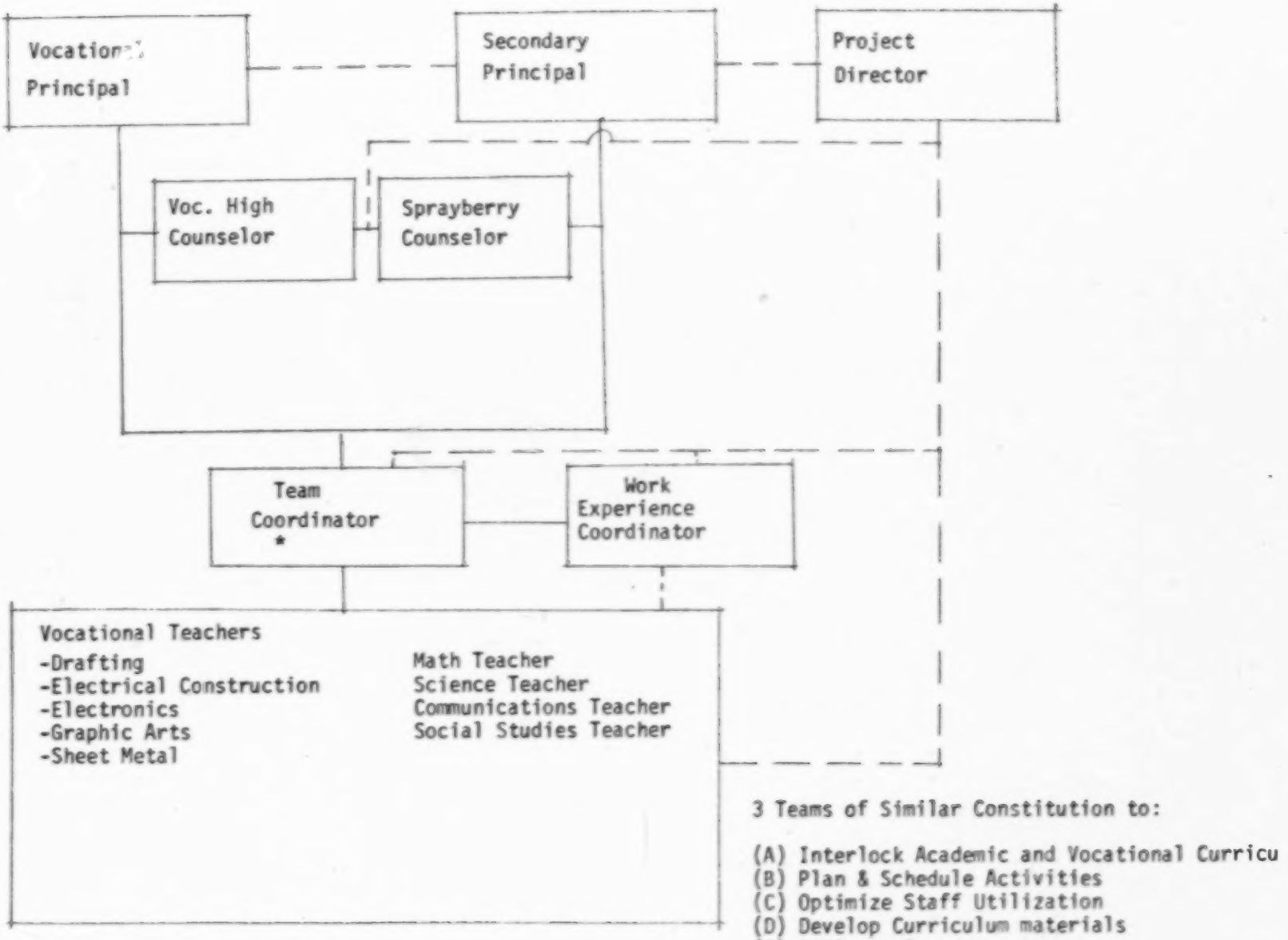


3 Teams of Similar Constitution to:

(A) Interlock academic and vocational curricula
(B) Optimize Staff utilization
(C) Plan and schedule activities
(D) Develop Curriculum materials
(E) Evaluate Process

*One each: Industrial Arts, Human Services, Business & Distribution

MIDDLE SCHOOL



*One Each: Office Occupations, T. & I. Clusters, Pre-vocational

SECONDARY

Results and Accomplishments

During the 1972-73 school year, the 155 elementary teachers in both the pilot and expansion schools implemented approximately 450 career development units involving 3,875 students. On the middle school - junior high level, approximately fifty (50) teachers at both the pilot and expansion schools implemented some ninety (90) units involving 1,400 students. During the year at the secondary level, approximately twenty five (25) teachers implemented forty (40) units involving about five hundred (500) secondary students.

The Placement effort described in the opening sections of this report was moderately successful in the placement of students leaving Sprayberry High School and in the placement of those students desiring full and part-time work while still in school.

In-service meetings and workshops continued to be held throughout the year with one (1) summer workshop involving participants on all levels, two (2) elementary in-service meetings, two (2) middle school workshop programs and one (1) secondary program being held during the year. Many group meetings and planning sessions were conducted during the school term in addition to the summer and Saturday in-service meetings.

THE FINAL REPORT ON THE EVALUATION OF A DEVELOPMENTAL PROGRAM OF OCCUPATIONAL EDUCATION

Douglas S. Katz
Robert L. Morgan

This project reported herein was performed pursuant to a contract with the Bureau of Adult, Vocational, and Technical Education, Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

CENTER FOR OCCUPATIONAL EDUCATION

North Carolina State University at Raleigh
Raleigh, North Carolina

June, 1973

Project No. 9-361-0063
Contract No. OEC-0-70-4781(361)

ACKNOWLEDGEMENTS

The task of evaluating the Cobb County Developmental Program of Occupational Education, which serves a diverse population of students, parents, teachers and administrators, would not have been possible without the assistance of many persons who have directly contributed to its completion.

The director especially wishes to express his appreciation to Mr. Douglas Katz, who was largely responsible for the evaluation effort. A special note of appreciation is expressed to Mr. W. Darrell Myrick, who assisted in both the data analysis and editing of the final report. The director also wishes to acknowledge the contributions of Ms. Nancy Rhodes, Ms. Katherine Gruenewald, and Ms. Faye L. Childers, who aided in data management and analysis.

Special appreciation is given to Mr. Joel Smith, Mr. Robert Cook, Mr. Albert Price and the other members of the Cobb County Program Staff who assisted in the data collection and the provision of much of the information contained in this report.

Finally, the director wishes to thank the Center clerical staff for their help in the preparation of the report.

Robert L. Morgan
Director of Evaluation

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INTRODUCTION

The development of any approach in education usually engenders speculation about the probable results of the approach. Evaluation has traditionally served as a method for determining the extent to which the desired ends have been accomplished and to discover the causual factors behind the actual results.

The present evaluation effort is now in its third and final year. During this time two primary intents took precedence over the more traditional use of evaluation: (1) to assist the program staff in understanding and improving their program, and (2) to provide a source of information that will facilitate dissemination of successful components of the program. Exemplary programs in vocational education were intended to serve as replicable models of educational systems; therefore the evaluation of these programs should serve to assist in developing a model that is both worthy and capable of being exported.

To understand and evaluate exemplary programs in vocational education it is necessary to explore the purpose behind the programs. These programs can not be viewed in isolation from the national goals, for the programs are the result of the needs of the nation as well as state and local conditions. The present report thus begins with a brief discussion of the federal role and its relation to the Cobb County Developmental Program of Occupational Education.

Finally, we must report that this evaluation is presently incomplete. Federal requirements for the exemplary programs annual reports do not provide adequate time for analyses of data based on school records; in fact, this evaluation report was due prior to the end of the school year. We have tried to include all of the relevant data that was available prior to the end of the school year, and where this was not possible we have relied on data from the previous school year.

THE FEDERAL ROLE

During the latter part of the decade of the sixties, the high level of youth unemployment precipitated renewed attention to the role of vocational education in providing educational opportunity for individuals in all strata of American society. One of the most significant results of this renewed attention was the inclusion of the concept of vocational education into the more general concept of occupational education, which included both prevocational and vocational education. The thinking which led to the revision of the vocational education concept was expressed most clearly in the House Report 1647 of the 90th Congress, Second Session:

> . . . The General Subcommittee on Education has concluded that the following five ideas recommended by the Advisory Council (on Vocational Education) deserve serious consideration: (1) any dichotomy between academic education and vocational education is outmoded; (2) developing attitudes, basic educational skills and habits are as important as skill training; (3) prevocational orientation is necessary to introduce pupils to the world of work and provide motivation; (4) meaningful career choices are a legitimate concern of vocational education; (5) vocational programs should be developmental, not terminal, providing maximum options for students to go on to college, pursue postsecondary vocational and technical training, or find employment. (House Committee on Education and Labor, 1968).

The Vocational Education Amendments of 1968 provided means for implementing the ideas in this House Report by including provisions for developing and administering exemplary programs and projects designed to produce new methodologies in occupational education. Under Part D (Exemplary Programs and Projects) of the Vocational Education Amendments of 1968 (P. L. 90-576, Section 141), Congress defined the purpose of exemplary programs and projects:

> . . . to stimulate, through Federal financial support, new ways to create a bridge between school and earning a living for young people who are still in school, who have left school either by graduation or dropping out, or who are in postsecondary programs for vocational preparation, and to promote cooperation between public education and manpower agencies.

Grant Venn, Associate Commissioner for Adult, Vocational, and Technical Education (Policy Paper AVL-V70-1, 1969) pinpointed the priorities that should be established for an exemplary occupational education program in light of the 1968 Amendments:

1. Provisions for broad occupational orientation at the elementary and secondary school levels so as to increase student awareness of the range of options open to them in the world of work.

2. Provisions for work experience, cooperative education and similar programs, making possible a wide variety of offerings in many occupational areas.

3. Provisions for students not previously enrolled in vocational programs to receive specific training in job entry skills just prior to the time that they leave the school. (Some of these training programs might be very intensive and of short duration.)

4. Provision for intensive occupational guidance and counseling during the last years of school and for initial placement of all students at the completion of their schooling. (Placement might be in a job or in postsecondary occupational training. Placement should be accomplished in cooperation with appropriate employment services, manpower agencies, etc.)

5. Provisions for the grantee or contractor to carry the program on with support from regular funding sources after the termination of the Federal assistance under Part D of P. L. 90-576. (Federal assistance under Part D cannot exceed three years.)

Grant Venn's statement became the program guidelines for individual proposals from the states. At the onset there was much confusion as to which took precedence the proposal preparation guidelines or the Grant Venn Policy Paper. Therefore, the Cobb County proposal generally did not meet the requirements of either document. Proposals were sent in by January 1, 1970. The expected notification date for funding was March 1, 1970; however, notification of contract award for Cobb County did not come until June 30, 1970. This late notification placed a stress on the Cobb County program, since in compliance with Cobb County policy no personnel could be hired until after official notification was received. In August the program budget was reduced by 10%, causing more problems in the early stages of initiation. The program director was hired immediately after notification of funding; other staff were not located until early August.

In August of 1970, U.S.O.E. sponsored a conference on exploratory programs in occupational education. This conference dealt with many of the issues that the program directors would face in the coming year. More importantly, U.S.O.E. and particularly B.A.V.T.E. demonstrated a firm commitment to the programs and set the stage for successful implementation.

The Pilot and Demonstration Branch of B.A.V.T.E. provided for feedback on the progress of the program at three levels: (1) on-site visitation by both regional and national officers, (2) required quarterly and annual reports prepared by the program staff, and (3) annual reports prepared by the third party evaluation team as required by U.S.O.E.

It was assumed by U.S.O.E. that an adequate research and curricular base had been previously developed, and that a program staff need only gather together and implement these existing materials and experiences. Within the approved expenditures contained in the Act, this might have been true. However, the components stressed in Venn's policy statement had never before been integrated into a single program. Furthermore, curricular materials were not available in many areas contained in the Cobb County program, causing much staff time to be allocated to the development of these materials.

The first four programmatic thrusts of the Venn policy statement appear to have been conceptualized as a single unit. However, problems arose in attempting to integrate the concepts as well as implant these modules into the existing curriculum. In order to assure the program's eventual success, it seemed that a reduced scope, increased fiscal resources and an extended time frame was necessary. The fifth thrust of Venn's statement called for the incorporation of successful aspects of the program into the schools after the termination of federal funds. While on the surface this requirement seems fairly simple to accomplish, the school finances in Cobb County are already severely stressed. Given the large in-service teacher training requirement of the program, in conjunction with the rapid turnover of teachers, continuation of successful aspects of the program seems to require additional finances that have not yet been committed.

The United States Office of Education's request for proposals described the general nature of the exemplary program which would be federally funded. The Georgia Department of Education and the Cobb County School System wrote a proposal which resulted in a set of process and product goals. These goals were not context free; e.g., they were in part influenced by the specific needs of the local community and the metropolitan area of Atlanta.

Once the goals were established, the program staff was responsible for developing and implementing process and product objectives that would bring about goal attainment. In the Cobb County proposal, no product objectives were present; therefore, all objectives that were to be measured by the evaluation staff were developed after the U. S. Office of Education had committed itself to funding the program.

The program staff worked with the evaluation staff in developing sets of process and product objectives that were both congruent with the goals and capable of being measured. Process objectives, to a large extent, were dependent upon available resources within the community.

After the process objectives had been developed, the implementors (e.g., teachers and counselors) began implementing the processes. In many cases this required the utilization of community resources, the nature of which occasionally restricted the implementors in their efforts.

It is important to note that the Cobb County Program relies heavily on the utilization of community resources. Field trips, resource people, job placements, and on-the-job training play a major role in the program. All of these activities involve interaction between the school system and the community. Members of the community have given generously of both their time and materiel.

The observed processes and products represent changes in the students, teachers, parents and curriculum due to the implementation of the program. The observed products are measured within the boundary of the school system and are one step removed from the actual outcome of the program. The observed outcome will result from changes in the students after they leave the school system; e.g., do they obtain employment, or are they able to enter postsecondary education?

The ultimate success or failure of the Cobb County Exemplary Program will not be known until the students who have been through the entire program (K-12) leave the school system.

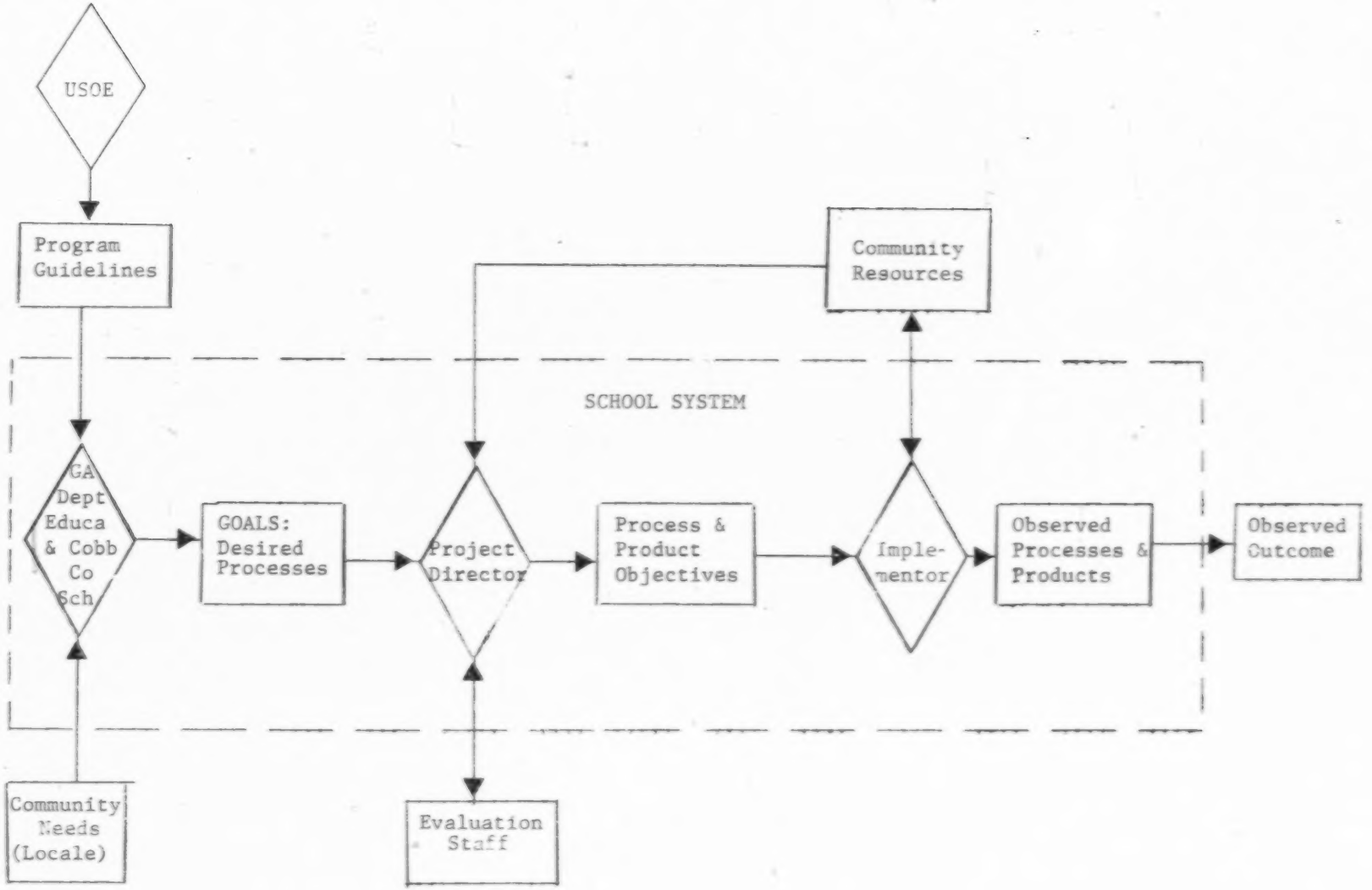

Figure 1

Development of Cobb County Program

LOCALE

Cobb County is one of the five counties composing the Metropolitan Atlanta area. It is the third largest in land area and population, with 437 square miles and 196,793 residents, (74 percent urban and 26 percent rural). With an average annual population increase of 8,262 since 1960, its rate of growth among the five counties is second only to Dekalb County. Projections are that the population will continue to increase by roughly 8,000 persons annually and by 1980 the population is expected to be 270,000 (3, p.2).

Marietta, the county seat of Cobb County, is located in the central part of the county, 15 miles north of Atlanta on U. S. Highway 41. The Marietta city limits encompass 8.91 square miles, with a 1970 population of 27,216.

Community Characteristics

More than 99 percent of the population in Cobb County is composed of two ethnic groups, blacks and whites. Based on the 1970 U. S. Census, there were 8,180 blacks and 188,160 whites residing in the county. While the whites are fairly evenly distributed throughout the populated areas of the County, the black population is concentrated in specific geographic areas. Almost half of Cobb County's black population reside within the Marietta city limits.

The 1970 U. S. Census reported 61,180 housing units in the county, 1,732 of which lacked some or all plumbing facilities. The average number of persons per housing unit was 3.1 in 1970, as compared to 3.45 in 1960. The median number of rooms per unit was 5.3, with a median value of owner-occupied dwellings of $19,200, and median rental value of $110 per month.

Per capita income in Cobb County has increased dramatically over the past ten years. In 1960 the per capita income was $1,549; by 1968 it had more than doubled, increasing to $3,122; and by 1970 it had reached $3,188. Predictions for 1983 show an increase in per capita income to $4,395 (3, p.5). The average household income in Cobb County for 1970 was $11,382.

Effective buying income per household is often considered to be a more accurate indicator of ability to purchase goods and services than is per capita income. Table 2 presents data for Cobb County as compared to other selected Georgia counties, the state and nation. Table 2 shows that the effective buying income per household unit in Cobb County of $10,596 in 1968 is approximately $2,000 above the state average and $1,000 above the national average.

Table 1. 1968 Cobb County and U. S. Population by Age Groups

Age Groups	Cobb County	U. S. (Dept. of Census)	Cobb Co. Percent	U. S. Percent
4 years and under	23,920	18,506,000	13.70	9.20
5-9 years	21,000	20,906,000	12.03	10.39
10-14 years	18,500	20,235,000	10.60	10.06
15-19 years	15,800	18,173,000	9.05	9.03
20-64 years	86,100	104,198,000	49.31	51.81
TOTAL	174,700	201,153,000	100.00	100.00

Estimates of the Population of the U. S. by Age, Race, and Sex: July 1, 1969, Current Population Reports (March, 1970), p.25 #441.

Table 2. Effective Buying Income Per Household Unit - 1968

	Income Per Household
Bibb County	$ 8,903
Cobb County	10,569
Fulton County	10,373
Muscogee County	8,696
Richmond County	9,219
Georgia	8,556
United States	9,592

Employment

It was estimated that in 1960 the labor force for the county was 35.9 percent of the total population. By 1965 the percentage had increased to 41.2, but by 1968 it had decreased to 40.5 percent (3, p.6). Of the 15 census tracts in the county, census tract 1 had the lowest per family income in 1968, while census tract 4 had the highest. The percentages of people employed from these two tracts, however, were almost equal: 39.4 percent for census tract 1 versus 39.5 percent for tract 4. Thus, percentage-wise, there are proportionately as many people working in census tract 1 as census tract 4, yet they represent opposite ends of the family income continuum within Cobb County.

There are over 65 firms manufacturing products in Cobb County which employ 25 persons or more, and 115 manufacturers employing fewer than 25 people. The largest single employer is the Lockheed-Georgia Company, which in 1972 employed more than 12,000 people.

The School System

The Cobb County School System is divided into nine attendance areas, each composed of one senior high school, one or more middle schools, and several, usually four, elementary schools. The Cobb County Developmental Program of Occupational Education is located in the Sprayberry attendance area, which includes Sprayberry High School, J. J. Daniell [illegible] High School, and Mountain View, Blackwell, Elizabeth and Bell's Ferry Elementary Schools. This attendance area has an enrollment of 4,894 students, while the total enrollment in the Cobb County School System is 43,892.

The Sprayberry attendance area was selected for several reasons:

1. The Cobb County Vocational High School is located adjacent to Sprayberry High School. It provides facilities for the vocational offerings in Cobb County. This school plays an important part in the project.

2. Each of the elementary principals in this area was receptive to innovations and change.

3. This attendance area was representative of a cross-section of Cobb County students. (Cobb County Proposal for Exemplary Program, p.41).

The Cobb County Vocational High School plays an important role at the high school level of this program. The school's facilities include fully equipped laboratories for the study of electronics, electrical construction, drafting, sheet metal and printing. The instructional programs presently being provided in these facilities offer students an opportunity to gain entry level job skills as well as exploratory experiences. The vocational high school was designed to serve all of the interested high school students in Cobb County System; however, with a capacity for handling only 200 full-time students, it has proven to be inadequate for meeting the vocational training needs of the area.

The average annual increase in school enrollment of 2,173 students over the past ten years has caused a facility shortage. During this period the annual enrollment increase has ranged from a low of 1,388 in 1968-69, to a high of 3,117 in 1966-67. Projections for the next ten years indicate that an average annual increase of approximately 2,000 students is expected.

Data regarding current expenditures per child in Average Daily Attendance (ADA) are shown in Table 3. In evaluating state and local expenditures per ADA child by comparison with data published by the National Education Association, certain other expenditures must be included, as shown below:

$437.70	$468.97	--	shown below
	20.02	--	appropriation to Georgia Retirement System
	8.49	--	federal grant to schools, lunch and milk program
	10.42	--	cost of operating the Department of Education
476.63	507.90	--	NEA computation of cost per ADA child

Table 3. State and Cobb County Current Expenditures for ADA Child by Years

Year	State Average	Cobb County
1962-63	$269.29	$253.98
1963-64	281.01	295.34
1964-65	302.81	306.88
1965-66	348.73	370.39
1966-67	409.03	399.27
1967-68	468.97	437.70
1968-69	N.A.	469.98
1969-70	N.A.	496.00
1970-71	N.A.	512.30

Source: "Cost per ADA Child," State Department of Education and Financial Records, Cobb County Schools.

It should be noted that Cobb County expenditures per child exceed the Georgia state expenditures only during the three year period 1963 through 1966. The Cobb County cost per child over this period shows a generally increasing but fluctuating expenditure pattern.

Cobb County's source of local school monies is a property tax. Under the Constitution of the State of Georgia the maximum tax that can be levied for maintenance and operation of the school system is 20 mills on the assessed valuation of the school property digest after homestead and personal exemptions have been deducted. Cobb County is currently levying the maximum millage. It thus appears that if Cobb County is to continue to support education at the current ratio of one-third of the total cost, additional local revenue must be secured through either other additional tax sources or by an increase in the millage. An increase in the millage can only be secured through a constitutional amendment.

Cobb County's bonding capacity available during the next ten years appears to be adequate to meet anticipated schoolhouse construction needs. It is assumed that additional funds will be needed during this period. In particular, additional funds will be needed for the construction of kindergarten facilities, which presently do not exist. In 1969 the county approved a $15,000,000 bond issue. Support was approximately 3 to 1 in favor of the bond.

The Cobb County Schools Comprehensive Study of 1970 points out that about 50 percent of the graduates of Cobb County High Schools do not go on to college or other postsecondary schools. In addition, there are many young people who leave school prior to completion of high school. The economy of Cobb County would then depend to a considerable extent on the availability of vocational programs of the right kinds and quality. The Cobb County Study was explicit in stating this: "The best interests of the area require more attention to vocational education programs by the schools," (3, p.29).

The need for a developmental program of occupational education was made clear in the Cobb County Study:

> Recent research on the nature of career choices has established the validity of career choices as being a process rather than an event. This process starts early in life. The elementary teacher is important in the process. The new middle school has an important role in vocational maturation, since it helps students move into the age of exploration and discovery. The high school program should be based on good work experiences, good attitudes, a broad command of the common elements in vocations and a sound general education insofar as individual student abilities will permit. (3, p.30)

The Cobb County School System, in conjunction with the Georgia Department of Education, was well aware of the possible benefits obtainable from a comprehensive program in career development. Prior to the initiation of the proposal submitted to the U. S. Office of Education, Cobb County had received a state grant to develop a model of a career development program. The nature of this model was congruent with the guidelines established by the U. S. Office of Education and developed into the proposal sent to U.S.O.E. Dr. Sidney High and Dr. Albert J. Riendeau of the U. S. Office of Education were contacted by Dr. James Bottoms of the Georgia Department of Education, Vocational Education Division, in connection with the development of the proposal.

To a large extent the proposal submitted to the U. S. Office of Education parallels the recommendations of the Cobb County Schools Comprehensive Study. This study had emphasized the importance of a developmental program that coordinated the academic subject matter with related vocational experiences, and this is reflected in the proposal submitted to U.S.O.E.

> The project will attempt to conceptualize and implement a developmental program of career exploration and occupational preparation in grades K-12 with inherent features which enable the program to serve the needs of all youth. Special provisions will be made for disadvantaged and handicapped students. Concrete experiences of vocational laboratories and actual work settings will be fused with the academic program in order to enhance the teaching and learning of basic academic skills by relating them to the world of work. (2, p.4)

The Cobb County School System serves a population that is economically well above the state and national averages. The rationale for selecting Cobb County as the site for an exemplary program in vocational education was based on the availability of well-equipped facilities for vocational training at both the secondary and postsecondary levels. While these facilities existed prior to the development of the program, a comprehensive vocational program to serve the needs of all students had not been established. Cobb County's Development Program of Occupational Education represents an effort to maximally utilize a well-equipped occupational education program.

It should not be assumed because of Cobb County's relatively high economic status that the students do not need a comprehensive program of vocational education. As previously stated, approximately 50 percent of Cobb County's students do not go on to college or other post-secondary training. After leaving school these students are likely to face many months of job hunting and marginal work. Cobb County and the Metropolitan Atlanta area will continue to need employees of considerable vocational and technical preparation; a comprehensive program in occupational education will assist students in finding meaningful employment rather than marginal employment.

CONCEPTUALIZATION OF THE EVALUATION

The developmental nature of the Cobb County Exemplary Program requires that the products and processes be integrated across grade levels; i.e., the products of one grade level should be well suited to enter the processes of the next grade level. The program can be conceptualized as a series of processes that were designed to eventually lead to the desired products. This section will describe the relationships between specific processes and products of the Cobb County Exemplary Program.

It should be pointed out that the following sets of processes and products were modified during the first year of implementation. The process objectives have remained relatively fixed, while the product objectives were substantially altered in order that they be measurable. Processes and products were not explicitly related at the onset of the program; the present conceptualization was completed several months after implementation. Certainly, additional refinement of both process and product objectives should be encouraged as the program matures.

The product goals for this project are defined as the desired products of the educational process. Goal achievement was assessed by means of the attainment of product objectives for that goal. If the "set" of objectives for a particular goal is achieved, then it will be assumed in general that the goal has been attained.

The process goals are the general types of activities that will be used to attain the product goals. Process objectives are the specific classes of activities that are considered necessary and sufficient for process goal actualization. It should be noted that each process goal has a unique set of process objectives that describe the particular types of activities encompassed by that goal.

While process goals have been assumed to lead to product goal fulfillment, there is the distinct possibility of achieving the former without the latter or, less likely, the latter without the former. For this reason it is important to "break out" the relationships between product and process goals and objectives. Figure 2 and the explanation immediately following it define the present conceptualization of the relationships between the goals and objectives. It should be noted that one product may be produced by many processes, and that one process may produce many products. This lack of isomorphism has led to problems in establishing cause-effect relationships. It also is obvious that other variables may be operating to produce products that are not being taken into account. However, in a program as massive as the Cobb County endeavor, such confoundings are expected. The next section is an attempt to minimize the confounding factors. For simplicity, the product goals, product objectives, process goals and process objectives will be listed separately.

Product Goals

Product Goal I

The student will develop an awareness of the relationship between an individual's self-characteristics (interest, values, abilities, personality traits) and the appropriateness of various occupational areas.

Product Goal II

The student will acquire an awareness of the occupational areas within the community, the characteristics and the contributions of each, and will extrapolate to build a frame of reference for occupational areas in the state and nation.

Product Goal III

The student will acquire an awareness of educational avenues necessary and those available relative to a wide range of occupational areas.

Product Goal IV

The student will build upon his awareness of self-characteristics, occupational areas, educational avenues, and activity-oriented experiences, an ability for decision-making.

Product Goal V

The student will acquire an awareness of the psychological and sociological meaning of work, and during his school activities will express a positive attitude toward self, others, educational programs, and different types of work roles.

Product Goal VI

To provide a more meaningful and productive educational program with special emphasis on students identified as disadvantaged and/or handicapped.

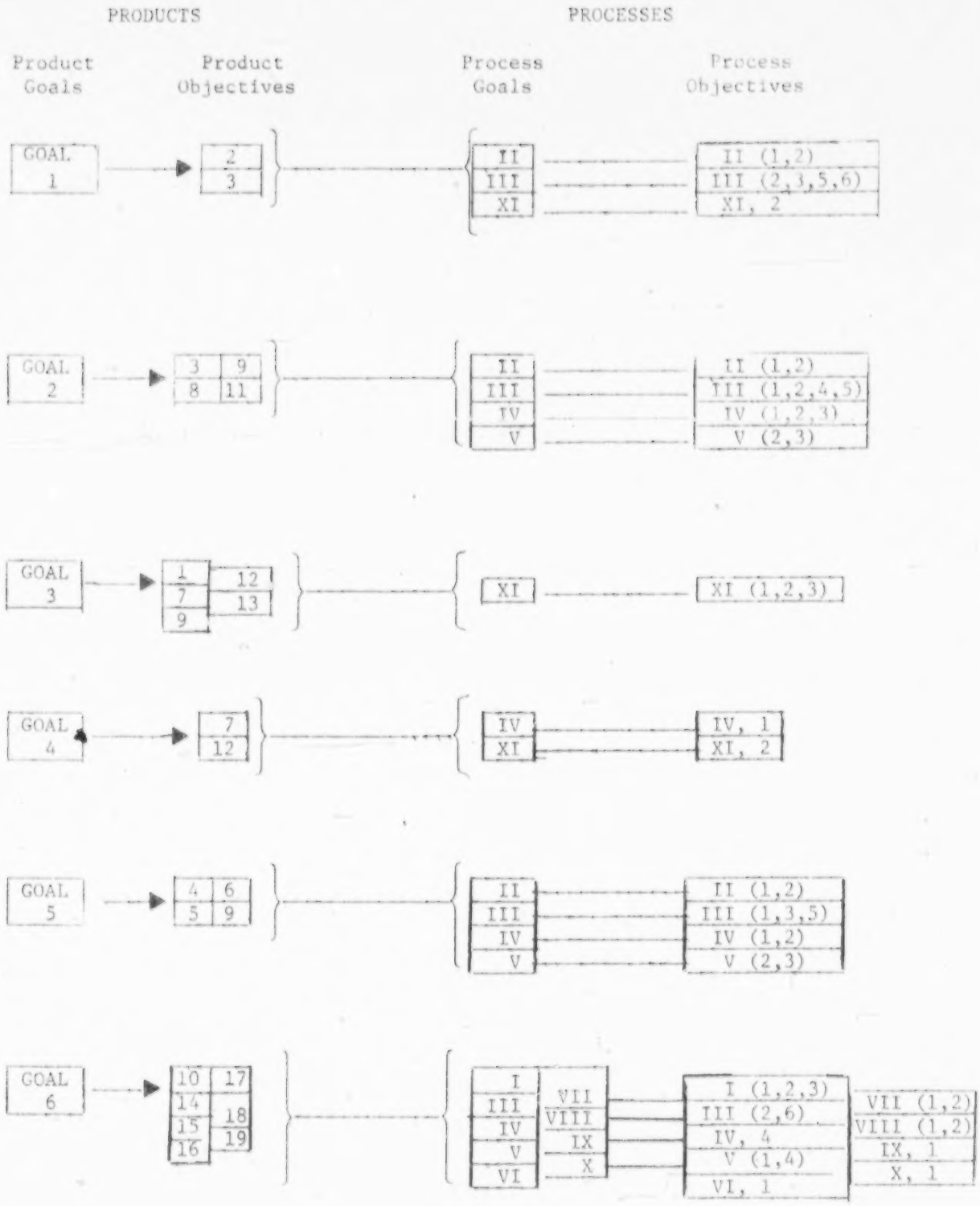

Figure 2

Relationship Between Goals and Objectives

Product Objectives

Product Objective 1

To increase student (grades 5-12) knowledge of the educational requirements of occupations as measured by the P.E.C.E. Knowledge Test.

Product Objective 2

To increase student (grades 5-12) knowledge of the abilities required in different occupations as measured by the P.E.C.E. Knowledge Test.

Product Objective 3

To increase student (grades 5-12) knowledge of occupational areas as measured by the P.E.C.E. Knowledge Test.

Product Objective 4

To increase the positiveness of student (grades 6-12) attitudes toward themselves and others as measured by an attitude scale.

Product Objective 5

To increase the positiveness of student (grades 6-12), parent and teacher attitudes toward occupational education as measured by attitude scales.

Product Objective 6

To increase student (grades 8-12) and teacher satisfaction with curriculum offerings as measured by the 1968 Cobb County Questionnaire.

Product Objective 7

To increase the percentage of students applying for and entering postsecondary education.

Product Objective 8

To increase the number of occupations students (grades 3-12) can list in two minutes.

Product Objective 9

To increase the number of high school students enrolled in vocational education programs.

Product Objective 10

To decrease the absentee rate.

Product Objective 11

To increase the number of students (grades 10-12) in work experience.

Product Objective 12

To increase counselor involvement regarding contact with students about career decisions.

Product Objective 13

To increase counselor involvement regarding contact with teachers to fuse career-oriented activities and information in the curriculum.

Product Objective 14

To increase parental involvement in the educational process.

Product Objective 15

To increase the proportion of students (graduates and dropouts) leaving school with job entry-level skills.

Product Objective 16

To reduce grade failures.

Product Objective 17

To increase the percentage of students placed on jobs by the school.

Product Objective 18

To increase student academic achievement as measured by an achievement test.

Product Objective 19

To reduce the dropout rate.

Process Goals

Process Goal I

This program in grades 1 through 7 will enhance the traditional academic curriculum with occupationally-oriented activities.

Process Goal II

This program in grades 1 through 7 will introduce students to community work roles.

Process Goal III

Through the P.E.C.E. Program this program will develop and implement programs of career exploration in such a manner as to enhance traditional academic learning and accomplish certain career development objectives.

Process Goal IV

This program will develop and implement programs of pre-vocational orientation into the middle school, ninth grade, in such a manner as to enhance traditional academic learning and accomplish certain career development objectives.

Process Goal V

This program will develop and implement an exploration program at the tenth grade level.

Process Goal VI

This program will provide an across-the-board work experience program at the tenth grade level for potential dropouts.

Process Goal VII

This program will develop and implement vocational clusters within the senior high school around which academic subject matter will be centered.

Process Goal VIII

At middle and secondary levels teachers will interlock exploration, pre-vocational, and career development with academic curriculum for certain students.

Process Goal IX

This program will provide students with job entry-level skills.

Process Goal X

This program will develop a job placement program which will place the responsibility on the school to help each student make the transition from school to work.

Process Goal XI

This program will provide both direct and indirect assistance to students in the career development process. Direct assistance will be through regularly-scheduled individual counseling and group guidance activities. Indirect assistance will be provided through counselor management of school and community resources to facilitate career development.

Process Objectives

Process Goal I - Objectives

1. Each teacher will implement at least one concrete experience program per grading period (4 per year).

2. Each teacher will self-evaluate each program implemented and submit a report of successes, failures, and suggestions for further development of that program.

3. Each teacher will work directly with the Career Development Specialists in the implementation of the programs.

Process Goal II - Objectives

1. Each teacher will take her class on at least one field trip (per grading period) to an on-job site.

2. Each teacher will have at least two community resource persons per grading period into her classroom to discuss their work roles with students.

Process Goal III - Objectives

1. The student will be exposed to the actual work settings of all levels within job clusters.

2. The student will perform aspects of the observed jobs that are appropriate in terms of skills and abilities.

3. The student will interview workers in order that he may know how various workers view their jobs.

4. The students will discuss their visitations and will extrapolate information obtained to additional occupational possibilities.

5. Same as II, 2.

6. Each teacher in grades 10 through 12 will provide one learning activity with supporting lesson plans per month designed to help students see the relationship between her subject matter and a cross-section of occupations, with occupations at each level in the Dictionary of Occupational Titles (D.O.T.) being given major focus at least one time.

Process Goal IV - Objectives

1. The student will participate in one of the three broad areas of occupations: (a) Business and Distribution, (b) Human Services, and (c) Industrial Arts (based on Construction), and will be exposed in depth to those aspects of each level that will further broaden the experience base for selecting more specific occupations.

2. Same as III, 2

3. Same as II, 2.

4. Same as III, 6.

Process Goal V - Objectives

1. The student will choose general business, trade, and industrial exploration or an academic program leading toward college programs such as liberal arts, engineering, pre-med., and others.

2. The student will be exposed one hour each day to the working conditions, characteristics and other details of various occupations within the community.

3. Same as II, 2.

4. Same as III, 6.

Process Goal VI - Objective

1. The student identified as a potential dropout will receive special training in consumer education and job skills one hour each day under a Coordinator of Vocational-Academic Education, and, if so inclined, will be placed in after school jobs, with coordinator-employer liaison for direction and follow-up.

Process Goal VII - Objectives

1. The student will be exposed to the characteristics of one of the following vocational clusters 2 hours each day: electrical, mechanical, metal-working, graphic arts, drafting and design, electronics and office occupations.

2. Same as III, 6.

Process Goal VIII - Objectives

1. Teams of teachers organized around vocational offerings with a team leader will meet once each week to develop lesson plans for interlocking.

2. Teachers will report results of last week's lesson plans with suggestions for improvement at each weekly meeting.

3. Students will be interviewed for their views of the interlocking.

Process Goal IX - Objective

1. The student will be provided opportunities of academic offerings at the senior high school for college preparation, vocational offerings at the vocational high school, on-the-job work experience in the community or the senior plan of specific training at the area technical school.

Process Goal X - Objective

1. The Job Placement Coordinator will establish channels of communication between the school and the community world of work utilizing resources of business placement offices, the local labor department, the Chamber of Commerce, and any other manpower agency in the area.

Process Goal XI - Objectives

1. Classroom teachers at the elementary level will be assisted in building into the existing curriculum such experiences as will provide maximum opportunity for vocational inquiry and awareness of the world of work.

2. At the middle and secondary levels counselors will, on a systematic and scheduled basis work directly with students in individual and group counseling sessions to accomplish career development and vocational objectives. The counselor will also work on a scheduled basis to accomplish these goals through teachers, curriculum, peer group, and community resources. At the middle school level the counselor will use pre-vocational laboratory experiences as a basis for counseling students toward career development objectives.

3. Intensive efforts will be conducted by the counselor to assist the non-college bound student in the transition to either enter employment or a post-secondary vocational program. The method will involve both direct and indirect experiences with students through the management of school and community resources to enhance a satisfactory transition from high school.

SCOPE OF THE PROGRAM

During the third year of implementation the Cobb County Development Program of Occupational Education served approximately 5000 students in the Sprayberry attendance area. At the elementary grade levels 3073 students in 115 classes were involved in project activities, which represents all classes at each of the four elementary schools. Four principals, 117 teachers and two career development specialists participated in the program at this level. The career development specialists worked directly with the teachers to assist in the coordination, operation and further development of the program. The focus of the program at the elementary grade levels was to provide students with a base for mastering future career development tasks through simulated experiences, observations, discussion and vicarious experiences. The major emphasis was on self and career awareness in order to promote students' awareness of the economic, social and personal significance of work, the existing range of occupations within Cobb County and beyond, and the importance of basic skills in every occupation.

At the middle school level (grades 7-9) the focus of the program was on occupational orientation and exploration. One phase of the program was directed toward offering the student an opportunity to orient himself further to several broad occupational areas and to acquire a basis of understanding for future educational and occupational decision-making. Another phase of the program attempted to provide students with an opportunity to explore a particular occupational area in greater depth.

The program at the middle school involved the principal, thirty-five academic teachers, three counselors, three team coordinators, one career development specialist, and a P.E.C.E. coordinator (Program of Education and Career Exploration). Approximately 1431 students participated in program activities during the third year of implementation.

At the seventh grade level teachers used the unit approach with their students. In coordinating their team activities, each group, consisting of four teachers, would select one teacher to serve as the lead teacher in integrating subject matter while the others contributed support through their classes. Approximately 591 seventh grade students were involved.

The major thrust of the program at the eighth grade level was the P.E.C.E. program. The P.E.C.E. program offered students an opportunity to explore occupations in one of six categories: service, business, organizational, expression of ideas, outdoors, and technology. The P.E.C.E. program was described as follows:

> After experiencing a work role, the student shares his observations with other students in small guidance groups where attention is focused on questions such as the following: How did I feel about myself while involved in the work role? What are other jobs in our society that might provide similar satisfaction? What are the different decisions one would have to make in order to enter a particular job? What value does the work role under question have economically as well as socially to society? What educational avenues could prepare one for a particular job? What are the different psychological aspects to be realized in this job? (Cobb County Proposal for Exemplary Program, p.9).

During the third year of the program 440 eighth grade students completed the P.E.C.E. program.

All ninth grade students enrolled in either Industrial Arts, Human Services, Business and Distribution, Band, or Art, with approximately 400 ninth grade students taking courses in the first three areas. The focus of Human Services, Business and Distribution, and Industrial Arts is:

A. To provide appropriate opportunities for students to explore in greater depth those areas of interest for the purpose of enabling them to convert a generalized choice into a specific choice.

B. To provide the range of experiences and activities necessary to aid students in the clarification and further identification of an area so that a specific choice can be made.

C. To expose students to the content, tools, settings, products, or services of a particular occupation through either direct experiences or through simulated experiences in pre-vocational areas as well as to the range of opportunities available in order to enable students to further differentiate choices within the area.

D. The experiences provided during this level should be designed to further increase the student's understanding regarding the different dimensions of career development . . . for the purpose of assisting the student to gain more toward a particular vocational preference (Cobb County Proposal for Exemplary Program, p.29).

The focus of the program at the high school level is to assist the student in converting his vocational preference into reality. The program continues to be exploratory in nature at the tenth grade level, but this is supplemented by specific preparatory experiences in the eleventh and twelfth grades. Work experience programs, on-the-job training, courses leading to job entry level skills, job placement programs, career development counseling, and the development of academic vocational units are all intended to prepare the students for employment and/or postsecondary education.

Thirty-three people were responsible for implementing the program at the high school level during the third year. The personnel from the vocational high school included the principal, counselor, and six vocational instructors, while Sprayberry personnel consisted of the principal, counselor, a work experience coordinator, two business education instructors, and twenty academic teachers. Approximately five hundred high school students participated in the program during the third year; this represents slightly less than one-third of Sprayberry's students.

At the secondary level, tenth grade students at Sprayberry High School may choose a class in career exploration, a class in general business or those classes more specifically relevant to occupational goals in the professions, etc. The student choosing the career exploration class rotates through the six occupational areas of training offered by the Vocational Department of Sprayberry High School. There he is introduced to each of those occupations and, subsequently, to similar occupations and to the characteristics, skills, and educational steps pertinent to still a wider range of occupations at varying levels.

The student choosing the general business class is introduced to typing, bookkeeping, office practices and other such activities and, as in the Career Exploration Program, the relativeness of mathematics, English, science, and social studies but, in this case, to business occupations.

Those students pursuing occupational goals in the professions are choosing courses that facilitate preparation for attaining these goals. All students are exposed to the unit approach through their subject area classes. As in the middle school, subject area concepts and skills are presented in such a way that they can be applied to individual career choices. This unit approach is continued through the eleventh and twelfth grade years.

For those students identified as potential dropouts there is a Program of Cooperative Vocational and Academic Education (C.V.A.E.) in addition to those activities previously mentioned. A C.V.A.E.

Coordinator meets one hour per day with such students to further strengthen the relationship of the various subject matters to each other, to the world of work, and to actual job situations in which these students are engaged. The Coordinator works as a liaison between the community and the school in helping the students to obtain after-school employment and to relate that employment to their schooling.

At the eleventh grade level, based upon information and exploration as mentioned above, the student may choose to enroll in the Vocational Department of Sprayberry High for job-entry level preparation in drafting, electrical construction and maintenance, graphic arts, radio and television repair or sheetmetal and welding, or he may choose any one of a number of cooperative programs such as Diversified Cooperative Training (D.C.T.), Vocational Office Training (V.O.T.), or Distributive Education (D.E.) or he may continue to choose those classes necessary to pursue an occupational goal in the professions.

At the twelfth grade level, the student may continue any one of those opportunities listed at the eleventh grade level and in addition he may choose the Senior Plan in which he attends the Marietta-Cobb Area Vocational Technical School for specific occupational preparation while graduating with his high school class.

At the secondary level, the emphasis is one of preparation for the next step through more specific occupational-skill preparation.

The guidance function is vital at all grade levels in the Cobb County Occupational and Career Development Program, with special emphasis at the secondary level to provide <u>every</u> student with information about occupational choices as well as educational avenues. Culminating the guidance function at the secondary level is a Placement Program drawing upon a Placement Coordinator, Man-Power agencies, guidance counselors, business personnel departments and other community resources in helping each student exiting the school in making his next step whether that be employment, further training, or higher education.

The Job Placement Coordinator surveys the local business community for prospective placement opportunities. When positions become available, he notifies the proper work-study coordinators in the school and in some instances communicates this information to the student body via intercom.

Periodically, the Job Placement Coordinator requests reports of placements from work-study coordinators to be included in the school's total placement report.

Seniors who want assistance finding full-time, permanent employment after graduation may register with the Job Placement Coordinator.

Any student who wants assistance finding summer employment may register with the Job Placement Coordinator.

Counselors and the Principal have been asked to refer student drop-outs to the Job Placement coordinator if they want employment help.

Records are kept of businesses contacted, employers' requests for student help, student applications for employment, student referrals to employers, and students placed in work situations.

DISSEMINATION ACTIVITIES

Part of the federal intent behind exemplary programs in vocational education was to develop replicable models that could be duplicated by other school systems; the Cobb County Project staff has done a commendable job of fulfilling this intent. In fact, prior to the completion of the three year period of federal funding, twenty-four school systems in sixteen states had already implemented the Cobb County Model. In addition, educators from more than thirty-four states as well as Japan, Jamaica and Austria visited the project during the past three years, while members of the Cobb County Project staff have visited twenty-three states during this same period of time to conduct workshops and/or in-service orientation.

Within the metropolitan Atlanta area there have been numerous public service announcements on radio, talks before civic groups, and television and newspaper reports on the project's activities. More importantly, the project has received national coverage in the following magazines and journals: McCall's (January, 1972); Instructor (February, 1972); American Vocational Journal (March, 1972); The Christian Science Monitor (April, 1972); Early Years (October, 1972); Educational Leadership (December, 1972); Phi Delta Kappan (February, 1973); and American Educator (June, 1973).

The Cobb County Program has also expanded its activities within the Cobb County School System. Whereas the original program only involved one high school, one junior high school and four elementary schools, during the 1972-73 school year the remaining thirty-four elementary schools and eight more Cobb County junior high schools began implementing various aspects of the program. During the coming school year (1973-74) all of the elementary and junior high schools will be engaged in career education activities.

THE PRODUCT EVALUATION

The product evaluation of the Cobb County Developmental Program of Occupational Education involved four different treatment conditions:

1. Students who had taken part in the program for three years (3Y);

2. Students who had taken part in the program for two years (2Y);

3. Students who had taken part in the program for one year (1Y);

4. Students who attended non-program schools in Cobb County and had therefore never taken part in the program (Control).

Depending upon the particular objective being measured, tests were administered to grades three through twelve during the week of April 16-20, 1973. These tests were previously administered during approximately the same time in the semesters of the 1970-71 and 1971-72 school years. All testing involved group administration.

The analyses of the objectives measured by tests or attitude scales administered to students were performed using 1 x 4 analyses of variance, where the first variable refers to the particular grade level and the second variable represents the four above mentioned treatment conditions. At three grade levels (grades 3, 9 and 10) one of the treatment conditions was nonexistent, and therefore 1 x 3 analyses of variance were performed. No meaningful analyses could be performed on the twelfth grade students' responses for the 1972-73 school year due to an inadequate number of students completing the instruments.

Some of the data based on school records (e.g., grade failures and applications for post-secondary education) could not be collected until the end of the school year and therefore are not included in the present report. Where applicable, the results of previous analyses of these objectives for the 1970-71 and/or 1971-72 school years will be reported. The analyses of data based on school records were performed using chi-square tests, which in most cases compared the treatment schools with the control schools in the North Cobb High School attendance area.

Data Presentation

Product Objectives 1-3

1. To increase student (grades 5-12) knowledge of the educational requirements of occupations as measured by the P.E.C.E. Knowledge Test.

2. To increase student (grades 5-12) knowledge of the abilities required in different occupations as measured by the P.E.C.E. Knowledge Test.

3. To increase student (grades 5-12) knowledge of occupational areas as measured by the P.E.C.E. Knowledge Test.

The P.E.C.E. Knowledge Test is a 75-item multiple choice instrument that is a modified form of the original P.E.C.E. Test developed by the Georgia State Department of Vocational Education personnel. The original version of the test contained 100 items and was intended to measure the effects of the P.E.C.E. program, which had been implemented in some Georgia schools during the 1969-70 school year. The instrument appeared to reflect each of the three areas mentioned in the above objectives.

Estimates of the reliability of the P.E.C.E. Knowledge Test were obtained using the Kuder-Richardson Formula 20 procedure. These estimates have produced reliabilities ranging from .82 to .95.

Separate analyses were performed on each grade level, with no significant differences being detected at any grade level. In other words, at no grade level did the treatment groups (3Y, 2Y and 1Y) differ from each other or the control group of students. Thus objectives 1-3 were not attained.

Product Objective 4

To increase the positiveness of student (grades 6-12) attitudes toward themselves and others as measured by an attitude scale.

A 64-item untitled attitude scale was developed to assess the positiveness of students' attitudes toward themselves and others. The scale is a composite adaptation of 41 selected items from the 64-item "Acceptance of Self and Others" scale developed by E. Berger (Shaw and Wright), and 23 selected items "The Self-Others Questionnaire," a 50-item scale developed by E. L. Phillips (Shaw and Wright). The instrument is essentially a Likert-type scale, except that it uses a modified response mode. Thirty-five items measure attitudes toward self, and 29 items measure attitudes toward others; therefore, two subscores are obtained.

The score for each item ranges from 1 to 5, with a low total score indicating a more favorable attitude toward self or others. Total subscores of 29 and 35 on the items measuring attitudes toward others and self, respectively, would indicate the most positive attitude in each case.

The analyses of the Self portion of the scale showed no significant differences between the treatment and control groups at any grade level, indicating that their attitudes toward themselves did not differ. It is worth noting that during the preceding school year (1971-72) the control group at grades eight and twelve had more positive attitudes towards themselves than did the treatment groups.

The analyses of the Others portion of the scale revealed one significant difference: At the eleventh grade level the three year treatment group (3Y) had significantly more positive attitudes towards others than did the control group. At all other grade levels there were no differences between the treatment and control groups.

These results indicate that while product objective 4 was not achieved in an absolute sense, in no case did the control group have more positive attitudes toward themselves or others than did any of the treatment groups at the same grade level. Additionally, the less positive attitudes of the treatment groups' attitudes toward themselves during the preceding year were no longer detectable during the 1972-73 school year.

Product Objective 5

To increase the positiveness of student (grades 6-12), parent and teacher attitudes toward occupational education as measured by attitude scales.

A 20-item untitled attitude scale was used to measure the positiveness of student attitudes toward occupational education. The instrument is a composite adaptation of 12 selected items from the 39-item "Opinions About Vocational Education" instrument (9), one item from the 60-item "Vocational Education Information Inventory" (1, 113), and seven items from the 20-item "Attitude Toward Vocational Education" instrument (6).

The scale utilized the Likert attitude scaling technique with the response modes being SA: I Strongly Agree with the statement; A: I Agree with the statement; ?: I am Undecided about the statement; D: I Disagree with the statement; and SD: I Strongly Disagree with the statement.

Ten items are worded positively toward vocational education and 10 negatively. The alternative responses are weighted from 5 (SA: I Strongly Agree with the statement), to 1 (SD: I Strongly Disagree with the statement) for those items worded positively; weights are reversed for those items which are negatively worded. The individual's score is the sum of the weighted alternatives chosen by him, with a high score indicating a positive attitude. The total possible score is 100.

Analyses of the students' responses revealed significant treatment effects at grades seven and eight, with no differences between the treatment and control groups being detected at the other grade levels.

At the seventh grade level the control group had less positive attitudes towards vocational education than both the 3Y and 2Y treatment conditions, indicating the attainment of product objective 5 for grade seven.

The only difference at the eighth grade level was between two of the treatment groups: the second year treatment students (2Y) had more positive attitudes towards vocational education than did the first year treatment students (1Y).

While no differences were detected at most of the grade levels applicable to product objective 5, in no case did the control students show more positive attitudes than the treatment students. Likewise, the two differences that were detected at grades seven and eight were both in the desired direction. Thus product objective five, as it applies to students, can be considered partially attained.

A 30-item attitude scale was used to measure the positiveness of teachers' attitudes toward vocational education. The scale is a composite of eight items selected from the 39-item "Opinions About Vocational Education" instrument (9); 12 items selected from the 60-item "Vocational Education Information Inventory," developed by Harold Byram (1); and 10 items selected from the 20-item instrument entitled "Attitude Toward Vocational Education," developed by Melville Parker and Richard Baker (6).

This scale utilized the Likert Attitude Scaling Technique, with the choice of answers being SA (Strongly Agree); A (Agree); ? (Undecided); D (Disagree); and SD (Strongly Disagree). For items which are worded positively towards vocational education, the alternative responses are weighted from 5 (Strongly Agree) to 1 (Strongly Disagree). For items worded negatively the weights are reversed. The individual's score is the sum of the weighted alternatives endorsed by him with a high score indicating a positive attitude toward vocational education.

The analysis of the teachers responses was performed with a t-test comparing the teachers' attitudes toward vocational education during the first year of the program (1970-71) with their attitudes during the third year of the program (1972-73). The results of this analysis were highly significant ($p < .001$), with the teachers' attitudes toward vocational education being more positive during the third year of the program than they were in the first year. Thus this portion of product objective 5 was attained.

Parents' attitudes towards vocational education were measured with the same instrument used to measure students' attitudes. The scale was administered during the first year of the program (May, 1971) and again during the third year (May, 1973) to parents of students in the Sprayberry and North Cobb attendance areas. Three comparisons were made using t-tests: (1) Sprayberry 1971 versus Sprayberry 1973; (2) North Cobb 1971 versus North Cobb 1973 and (3) Sprayberry 1973 versus North Cobb 1973.

The results of these tests were: (1) No significant difference between Sprayberry parents' attitudes in 1971 versus 1973; (2) a significant ($p < .01$) decrease in the positiveness of North Cobb parents' attitudes between 1971 and 1973, and (3) a significant difference ($p < .01$) between Sprayberry and North Cobb parents' attitudes in 1973, with the Sprayberry parents having more positive attitudes toward vocational education. This component of product objective 5 is therefore considered partially attained.

Product Objective 6

To increase student (grades 7-12) satisfaction with curriculum offerings as measured by the 1968 Cobb County questionnaire.

Student satisfaction with curriculum offerings was to be measured by administration of a Cobb County questionnaire that had previously been administered within the school district. The questionnaire was administered during the 1970-71 school year; however, a misinterpretation of administration instructions and the rather free format for responses made evaluation of Objective 6 impossible.

During the second year of the program the evaluation staff replaced the Cobb County questionnaire with the Education Scale, a 22-item, Likert-type scale developed by Rundquist and Sletto (7,233). The Education Scale assesses the positiveness of attitudes towards education, thus Objective 6 is now being evaluated in terms of students' attitudes towards education rather than their satisfaction with curriculum offerings.

Analyses of the students' responses on the Education Scale resulted in significant treatment effects only at the seventh and eighth grade levels; neither of which were in the desired direction. At the seventh grade level the control group of students had more positive attitudes than the second year treatment group (2Y), while at the eighth grade the control group expressed more positive attitudes than the first year treatment students (1Y).

While it is evident that the above results do not indicate an increase in the positiveness of program students' attitudes toward education, it would be erroneous to conclude that the program has decreased the positiveness of the students' attitudes toward education. Rather, it appears that the program has had little effect on the students' attitudes

towards education. Partial support for this conclusion is given by the fact that the control groups at the seventh and eighth grades had more positive attitudes towards education than any other groups at any other grade level. The question that remains unanswered is why do these two control groups have more positive attitudes towards education than all other groups?

Product Objective 7

To increase the percentage of students applying for and entering postsecondary education.

Information pertaining to the attainment of this objective for 1972-73 could not be provided to the evaluation staff in time for inclusion in this report. However, the number of 1971-72 twelfth grade students applying for entry into postsecondary education is available and will be presented here. The following comparisons are therefore restricted to the first part of product objective 7 for the 1971-72 school year: To increase the percentage of students applying for postsecondary education.

The numbers of students applying for postsecondary education from the project school (Sprayberry High School) and the control school (North Cobb High School) are presented below. The total number of students listed for each school represents the number of twelfth grade students enrolled during the 1971-72 school year

Table 4 . Number of Twelfth Grade Students Applying for Postsecondary Education, 1971-72 School Year

School	Applied	Did Not Apply	Total
Sprayberry H.S.	163	131	294
North Cobb H.S.	84	127	211

A chi-square test was performed to determine if there was a significant difference ($p < .05$) between the proportions of students applying for postsecondary education from these two schools. The results were highly significant ($p < .001$), with Sprayberry High School having a higher proportion of its students applying for postsecondary education than did North Cobb High School.

Product Objective 8

To increase the number of occupations students (grades 3-12) can list in two minutes.

The number of occupations a student can list in two minutes was considered to be a partial index of his familiarity with the world of work. Students were tested in groups, with each student writing down as many occupations as he could in two minutes.

Significant ($p < .05$) differences between the number of occupations listed by treatment and control students were detected at grade levels 4, 5, 6, 7, and 10. There was no control group at the third grade level, and no significant difference existed between the three treatment groups.

At the fourth grade level all three treatment groups (3Y, 2Y and 1Y) listed significantly more occupations than did the control group, while no differences were detected between the three treatment groups.

The analysis of the fifth grade scores revealed the same results as those obtained at the fourth grade: all treatment conditions (3Y, 2Y and 1Y) listed a significantly greater number of occupations than the control group, with no differences between any of the treatment conditions. The sixth grade students followed this same pattern: all treatment conditions did better than the control while not differing from each other.

At the seventh grade level the three year treatment group (3Y) listed significantly more occupations than the 1Y and control groups, and while the 3Y group did list more occupations than the 2Y group this difference was not significant ($p > .05$). The 2Y group also listed significantly more occupations than the 1Y students, but did not do significantly better than the control group. No significant difference ($p > .05$) was detected between the first year treatment students (1Y) and the control group.

There was no two year treatment condition (2Y) at the tenth grade level, however both the 3Y and 1Y treatment groups did significantly better than the control group. No significant difference existed between the number of occupations listed by the 3Y and 1Y students.

At no grade level did the control group list a significantly greater number of occupations than any treatment groups, while at the elementary, middle and secondary school levels at least one treatment group did better than the control group. The above results imply the full attainment of objective 8 at the elementary school level, with partial attainment of this objective at both the junior and senior high school levels.

Product Objective 9

To increase the number of high school students enrolled in vocational education programs.

The proportions of students at Sprayberry High School and North Cobb High School enrolled in vocational education programs during the 1972-73 school year were compared using a chi-square test. The results of this test were highly significant ($p < .001$), with Sprayberry having a greater proportion of its students enrolled in vocational programs. This objective was therefore attained.

Product Objective 10

To decrease the absentee rates at the middle and secondary school levels.

Two comparisons were made to measure the attainment of this objective: (1) The absentee rate at Sprayberry High School was compared with North Cobb's absentee rate, and (2) the absentee rate at J. J. Daniell Junior High School (the project school) was compared with the absentee rate at Awtrey Junior High (the control school). Both comparisons were based on attendance records from September, 1972 until February, 1973, and were performed with chi-square tests.

At the senior high school level no significant differences were detected between the absentee rates at the project and control schools. This same result was obtained during the preceding school year, however during the first year of the project (1970-71) Sprayberry High School had a significantly higher absentee rate than did the control school. Thus while Sprayberry's absentee rate was no lower than North Cobb's during the 1972-73 school year, the difference that was detected during the first year of the project (1970-71) no longer existed.

At the junior high school level the 1972-73 absentee rate at J. J. Daniell was significantly lower ($p < .01$) than the absentee rate at the control school. This was the third consecutive year that J. J. Daniell had a lower absentee rate than the control school.

These results indicate full attainment of product objective 10 at the junior high school level and partial attainment of this objective at the senior high school level.

Product Objective 11

To increase the number of students in work experience (at the high school level).

Data necessary for the 1972-73 evaluation of this product objective could not be obtained in time for this report. The following results are therefore based on data from the 1971-72 school year.

Evaluation of product objective 11 involved a chi-square test to compare the ratio of students having work experience to students not having work experience across the two high schools (Sprayberry and North Cobb). The chi-square test was highly significant ($p < .001$), with Sprayberry having a higher proportion of its students involved in work experience. Product objective 11 was therefore attained.

Product Objective 12

To increase counselor involvement regarding contact with students (grades 11-12) about career decisions.

Two measures were used to evaluate the attainment of this objective: (1) A questionnaire was administered to students (grades 11-12) asking them to indicate the number of times they had talked with a school counselor regarding career decisions, and (2) the results of the process evaluation conducted in March, 1973, dealing with the extent of counselor involvement.

Data derived from the questionnaire were analyzed, by grade level, with a chi-square test. Comparisons were made between the frequency of interactions with a counselor by students at the project school versus the control school. The results of the analyses indicated no significant differences between the frequency of counselor interactions for students at the two schools.

Five items on the form used for the process evaluation are directed at counselor involvement with students regarding career decisions. These items deal with the extent to which counselors have:

1. been involved in occupational placement of students;
2. been involved in educational placement of students;
3. been involved in technical training placement of students;
4. worked on a systematic and scheduled basis with students in individual career guidance sessions;
5. conducted one career group guidance unit per nine week grading period.

On a scale from 0 to 4, with 0 indicating the least attainment and 4 indicating the greatest attainment, the items were rated as follows: Item 1, 2; item 2, 2; item 3, 2; item 4, 2; item 5, 1. The results of these measures, taken in conjunction with the students' responses to the previously described questionnaire, indicate that product objective 12 was not attained.

Product Objective 13

To increase counselor involvement regarding contact with teachers to fuse career-oriented activities and information in the curriculum.

Measurement of this objective was originally going to be performed through an item analysis of a questionnaire that dealt with the counseling services in the schools. Two factors contributed to the rejection of this approach: (1) During the 1971-72 school year so few teachers completed and returned the questionnaire that an item analysis was not feasible; and (2) a major portion of the process described by this objective is performed by the coordinators.

The reader should gain an adequate understanding of the relative attainment of product objective 13 by referring to the Process Evaluation section of this report.

Product Objective 14

To increase parental involvement in the educational process.

This objective was evaluated at the elementary and secondary school levels by the process evaluation, conducted in March, 1973. The process evaluation team was to indicate the extent to which the coordinators had "developed community involvement through participation of parents." On a scale ranging from zero to four, with zero indicating the least accomplishment and four indicating the highest accomplishment, the elementary coordinator received a rating of four, while at the secondary school level the rating was three. Parental involvement was not evaluated at the middle school level.

Product Objective 15

To increase the proportion of students (graduates and dropouts) leaving school with job entry level skills.

The operational definition of "job entry level skill" being used in the evaluation of this objective was the completion of specific sets of courses in the vocational high school or sufficient participation in a job training program while still enrolled in school. Data necessary for the evaluation of this objective for the 1972-73 school year were not available at the time of the preparation of this report, and therefore the following analyses are based on the 1971-72 school year.

The evaluation of objective 15 focused only on those students who had dropped out of or graduated from high school during the 1971-72 school year. Comparisons were made between the numbers of students from Sprayberry and North Cobb High Schools with and without job entry level skills. A chi-square test was performed and no significant difference

was detected ($p > .05$), indicating that the proportions of graduates and dropouts from these two schools having job entry level skills were not significantly different. Objective 15 was therefore not attained.

Product Objective 16

To reduce grade failures at the middle and secondary schools.

Data necessary for the evaluation of this objective for the 1972-73 school year were not available in time to be included in this report. The following results are therefore based on the data from the 1971-72 school year.

The evaluation of objective 16 involved a chi-square test between the proportion of grade failures in the Sprayberry attendance area, grades 7-12, with the proportion of grade failures at the same grade levels from the North Cobb attendance area. The chi-square test showed a significant difference between the two attendance areas ($p < .01$), with the Sprayberry attendance area having a lower proportion of grade failures. It should be noted that when the same test was applied to the 1970-71 data no significant difference was present. These results indicate that product objective 16 was attained during 1971-72.

Product Objective 17

To increase the percentage of students (grades 10-12) placed in jobs by the schools.

The following evaluation of product objective 17 is based on the numbers of students placed on jobs during the 1971-72 school year; data necessary for the evaluation of this objective for the 1972-73 school year was unavailable at the time of the preparation of this report.

The numbers of students from Sprayberry and North Cobb High Schools placed in jobs during the 1971-72 school year were compared using a chi-square test. The results of this test were highly significant ($p < .001$), with Sprayberry having a higher proportion of job placements.

A chi-square test was also performed on the proportion of job placements from Sprayberry High School during the 1970-71 versus the 1971-72 school year. The results of this test also indicated a significant increase in the number of job placements ($p < .001$). Both of these results indicate that product objective 17 was attained.

Product Objective 18

To increase student academic achievement as measured by achievement tests.

Measurement of this objective was to be based on achievement tests administered by the Cobb County School System. Unfortunately, the school system does not have achievement test scores on all of its students, nor were they able to test a representative sample from each grade level within the program and control schools. The following results are based on achievement tests administered to third, fourth and sixth grade students tested during the fall semester, 1972. These were the only achievement test scores made available to the evaluation staff, and are based on the mean composite scores, by grade and school, on the Iowa Tests of Basic Skills.

At the third grade level the tests were administered in September, 1972, and the scores should therefore be compared to a grade equivalent of 3.1. The average grade equivalent score for all third grade students tested in the four project elementary schools was 3.35, and the average for the two control elementary schools was also 3.35. The mean grade equivalent scores for each of the project schools were 3.7, 3.5, 3.3 and 2.9, while the two control schools' mean scores were 3.5 and 3.2.

Fourth grade students in the project and control schools were tested in October, 1972, and the expected grade equivalent score should therefore be approximately 4.2. The overall mean score for the four project schools was 4.15, while the average of the two control schools was a grade equivalent of 3.95. The four project schools had mean scores of 4.4, 4.3, 4.2 and 3.7; the two control schools had mean grade equivalent scores of 4.0 and 3.9.

The sixth grade students were also tested in October, 1972, and therefore the expected grade equivalent score should be approximately 6.2. The overall mean of the four project schools was 6.0; the control schools' overall mean was 5.8. The four project schools' mean grade equivalent scores were 6.5, 6.3, 5.8, and 5.4, while the two control schools had mean scores of 6.2 and 5.5.

The information provided to the evaluation staff was insufficient for determining whether or not the above differences between the project and control schools were statistically significant. It is clear that the overall means for the project schools were equal to or higher than the overall means of the control schools at each of the three grade levels tested. For this reason it is concluded that product objective 18 was partially attained.

Product Objective 19

To reduce the dropout rate (at the middle and secondary school levels).

The number of students dropping out of school during the 1972-73 school year would not be available to the evaluation staff until the end of the school year. The following results are based on the 1971-72 school year.

A chi-square test was performed on the dropout rates in the Sprayberry and North Cobb attendance areas during the 1971-72 school year. No significant difference was detected, indicating that the dropout rate at Sprayberry was no lower than at North Cobb, and therefore objective 19 was not attained.

Summary of Product Evaluation

The results of the third-year product evaluation indicate a general trend toward the attainment of most of the product objectives. On all but one objective did the students in the project do equal to or better than the control students, and the single exception to this--students' attitudes toward education, grades seven and eight--was apparently not a result of the students' participation in the project. The analyses of the data relevant to several objectives showed no differences between the project and control groups, however even for some of these objectives the lack of any difference indicates an improvement over the first year of the project. For example, during the first year of the project the absentee rate at the project high school was higher than that at the control high school, whereas no difference was detected during the second year of the project.

Objectives which were partially or fully attained include:

1. Objective 4: Students' attitudes toward others;
2. Objective 5: Students' parents' and teachers' attitudes toward vocational education;
3. Objective 7: Applications for postsecondary education;
4. Objective 8: Occupational listing;
5. Objective 9: Vocational education enrollment;
6. Objective 10: Absentee rates at the junior and senior high schools;
7. Objective 11: Work experience;
8. Objective 13: Counselor/teacher interactions;
9. Objective 14: Parental involvement;

10. Objective 16: Reducing the number of grade failures;

11. Objective 17: Job placements; and

12. Objective 18: Academic achievement.

The relationships between the product objectives and product goals were described in an earlier section of this report (see Figure 2, p. 15). The implications of the product evaluation, as indicated by the above results, are that product goals 2, 3, 4, 5 and 6 were partially attained (i.e., at least half of the objectives related to each of these goals were attained). Product Goal 1 was measured entirely by the P.E.C.E. Knowledge Test (objectives 1 and 2), and this test was unable to detect any difference between the project and control students.

In conclusion, the Cobb County Program appears to have made major gains towards achieving its desired ends. There is still much room for improvement in terms of the absolute attainment of all the product goals and objectives, however the relative gains that have been made during the first three years of the project are substantial.

PROCESS EVALUATION AND RECOMMENDATIONS

On March 28, 1973, the final Process Evaluation of the Cobb County Occupational and Career Development Program was conducted. The members of the Evaluation Team were Paul Scott, Elizabeth Teamire, Jerome Robock, and Robert L. Morgan. At 9:30 a.m., introductory remarks were made by Joel Smith, the Project Director, and Dr. Harold Dennis, Associate Superintendent for Instruction. The remarks detailed the historical development of the project, the dissemination efforts, and the future plans for expansion from the pilot schools to the remaining schools in the Cobb County System.

At 10:00 a.m., the Evaluation Team reconvened at Sprayberry High School. The Team talked with the principal, two (2) counselors, two (2) teachers and several students. Following this meeting, the Team had been scheduled to meet with the vocational supervisor and several vocational teachers. Due to the fact that neither the teachers nor the supervisor were present, the Team failed to observe the Vocational Program in operation.

At 1:00 p.m., the Team arrived at Mountain View Elementary School. The Team visited four (4) classrooms and talked with several teachers, students and the school principal.

Following the visit to the elementary school, the Team proceeded to J. J. Daniell Junior High School and there talked with the principal. Later, classrooms were visited, and the Team talked with teachers, counselors and students.

At each site the Team attempted to ascertain the degree of achievement of specific process objectives. (Refer to the following form). Each Team member independently rated the degree of attainment of each process objective. The average ratings (rounded up to the nearest whole number) of the Team members are reported on the following form.

The Team was favorably impressed by the enthusiasm generated by the Project Staff, as well as their level of competence. The dissemination efforts of the program have certainly created a national awareness of the activities of this project. Administrative, teacher and student attitudes toward Career Education at the Elementary and Junior High level were most impressive, as was the Junior High counselors' commitment. It was felt that at all levels

many important conceptual and operational break-throughs have been accomplished in unit development and implementation. An adequate foundation has been laid for a truly effective Career Education Program that could reasonably be implemented in any school system; however, it was felt that certain aspects of the program must be polished prior to institutionalization.

The "critical mass" of Project Staff, teachers, and administrators at the pilot schools can not be readily replaced. If the Cobb County School System is committed to implementing the program on a county-wide basis in a reasonable time frame, the plan submitted by the Project Staff should be carefully considered. Failure to maintain the current effort will most surely require additional expenditures at a later date.

The recommendations made by the Evaluation Team represent the minimum staffing and district commitment necessary to implement the program county-wide. Minimally, three (3) full-time staff members are required to carry out the program. Ideally, if the plan developed by the Project Staff were implemented, with special attention given to the weaknesses specified in the recommendations, Cobb County would retain its leadership role in the Career Education movement.

Summary of the Process Objective Ratings

At the elementary level, process objectives associated with coordinators, teachers, students, and administrators were rated at the highest possible level. Middle school process objective attainment was somewhat less than at the elementary level. Generally, the coordinator, teacher, counselor and student process objective attainment was high.

At the secondary level, the degree of process objective attainment was lower than at any other level. The coordinator ratings were less positive due to the fact that the coordinator was over extended. Obviously, no one person could reasonably carry out the twenty-two process objectives required of this coordinator. The teacher process objectives were rated lower due to the relatively few teachers involved in the program. Those few students who have been exposed to the career education units seem to have benefited. Rating of student process objective attainment was lower due to the number of students involved. The counselors' process objective attainment was very low. These ratings reflect a lack of effort on the part of counselors to take an active role in implementation of the program, and an attitude of "Let's let the project staff do it." No evidence was presented that the vocational counselor fulfilled any of the process objectives.

The central staff of the Cobb County School System was rated very high on its commitment to continuation of career education, but not so high on the planning for this aspect. The elementary and middle school principals were rated very high on facilitation, participation and understanding of the Career Education program. The high school principal exhibited a very passive attitude, and provided no evidence of any active involvement or even an elementary understanding of the Career Education program.

The project administration was rated moderately high on the coordination of the project staff despite the failure to provide for vertical articulation at the high school level, or to produce an overall operational model. The curriculum writers were rated very high, as were the project staff in terms of their attainment of program process objectives.

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM
ELEMENTARY CAREER ORIENTATION AND INFORMATION
March 28, 1973

(0 - LOWEST to 4 - HIGHEST)
(N - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

A. COORDINATORS

The extent to which coordinators have:

0 1 2 3 4 1. Worked directly with all teachers per grade level in each feeder elementary school to provide for the development of activity centered units of instruction.

0 1 2 3 4 2. Developed in-service activities for teachers, principals, and other personnel to include workshops for unit development, teacher-orientation and teacher exchange sessions.

0 1 2 3 4 3. Procured materials and supplies necessary for implementing career development activities.

0 1 2 3 4 4. Instructed teachers in the use of manipulative tools necessary for carrying out hands-on activities.

0 1 2 3 4 5. Procured field trip sites and made all necessary arrangements for transporting students.

0 1 2 3 4 6. Monitored on-going units.

0 1 2 3 4 7. Procured and scheduled resource persons for classroom visitation.

0 1 2 3 4 8. Developed community involvement through participation of parents.

0 1 2 3 4 9. Involved many segments of community in implementing unit activities.

B. TEACHERS

The extent to which teachers have:

0 1 2 3 4 1. Implemented a minimum of three (3) instructional units of career orientation which will be utilized in their classroom during the 1972-73 school year. These units correlate academic areas to the basic career being studied.

(0 - LOWEST to 4 - HIGHEST)
(R - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

0 1 2 3 4 2. Incorporated academic tie-ins in classroom activity-centered units.

0 1 2 3 4 3. Incorporated role-playing techniques in classroom activity-centered units.

0 1 2 3 4 4. Incorporated occupational information in classroom activity-centered units.

0 1 2 3 4 5. Incorporated hands-on manipulative techniques in classroom activity-centered units.

0 1 2 3 4 6. Incorporated resource persons in classroom activity-centered units.

0 1 2 3 4 7. Incorporated field trips to on-the-job work sites in conjunction with classroom activity-centered units.

0 1 2 3 4 8. Recorded in a summary log teaching approaches utilized and the student responses to these techniques.

0 1 2 3 4 9. Demonstrated an understanding of the underlying concepts of the program.

0 1 2 3 4 10. Expressed interest in continued participation in the career development effort next year.

0 1 2 3 4 11. Involved students in the planning and implementation of units.

C. STUDENTS

The extent to which students:

0 1 2 3 4 1. Understand the relationship of subject matter areas to the use of these knowledges and skills in the world of work.

0 1 2 3 4 2. Appear to respond positively to the program.

0 1 2 3 4 3. Express interest in continued participation in the career development effort next year.

0 1 2 3 4 4. Participate in selection of unit direction.

0 1 2 3 4 5. Express a feeling of participation, involvement and contribution to unit activities.

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM
MIDDLE SCHOOL CAREER INFORMATION AND PREPARATION
March 28, 1973

(0 - LOWEST to 4 - HIGHEST)
(N - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

A. COORDINATOR

The extent to which coordinator has:

0 1 2 3 4 1. Coordinated the interlocking efforts of various subject matter teachers.

0 1 2 3 4 2. Worked directly with at least two (2) teachers per subject matter per grade level to provide for the development of activity-centered units of instruction.

0 1 2 3 4 3. Developed in-service activities for teachers, principals, other personnel to include workshops for unit development, teacher-orientation and teacher-exchange sessions.

0 1 2 3 4 4. Procured materials and supplies necessary for implementing career development activities.

0 1 2 3 4 5. Procured field trip sites and made all necessary arrangements for transporting students.

0 1 2 3 4 6. Monitored on-going units.

0 1 2 3 4 7. Procured and scheduled resource persons for class visitation.

0 1 2 3 4 8. Involved many segments of community in implementing unit activities.

B. TEACHERS

The extent to which teachers have:

0 1 2 3 4 1. Interlocked various subjects in unit implementation.

0 1 2 3 4 2. Met periodically as a team to coordinate unit activities.

0 1 2 3 4 3. Implemented a minimum of one (1) unit of career exploration per twelve (12) week grading period during 1972-73 school year. These units correlate academic areas to the basic career being studied through work simulation activities.

(0 - LOWEST to 4 - HIGHEST)
(N - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

0 1 2 3 4 4. Utilized guidance services in unit-related activities.

0 1 2 3 4 5. Incorporated academic tie-ins in classroom activity-centered units.

0 1 2 3 4 6. Incorporated role-playing techniques in classroom activity-centered units.

0 1 2 3 4 7. Incorporated occupational information in classroom activity-centered units.

0 1 2 3 4 8. Incorporated hands-on manipulative techniques in classroom activity-centered units.

0 1 2 3 4 9. Incorporated resource persons in classroom activity-centered units.

0 1 2 3 4 10. Incorporated field trips to on-the-job work sites in conjunction with classroom activity-centered units.

0 1 2 3 4 11. Demonstrated an understanding of the underlying concepts of the program.

0 1 2 3 4 12. Expressed interest in continued participation in the career development effort next year.

0 1 2 3 4 13. Involved students in the planning and implementation of units.

C. COUNSELORS

The extent to which counselors have:

0 1 2 3 4 1. Worked on a systematic and scheduled basis with students in individual career guidance sessions.

0 1 2 3 4 2. Assisted teachers in providing occupational information related to individual students' career objectives.

0 1 2 3 4 3. Been involved in making students aware of the career exploration program.

0 1 2 3 4 4. Conducted a minimum of one (1) career guidance session in conjunction with each career exploration unit at the seventh (7th) grade level.

(0 - LOWEST to 4 - HIGHEST)
(N - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

0 1 2 3 4 5. Conducted a minimum of one (1) career guidance session in conjunction with each career exploration unit at the eighth (8th) grade level.

0 1 2 3 4 6. Conducted a minimum of one (1) career guidance session in conjunction with each career exploration unit at the ninth (9th) grade level.

D. STUDENTS

The extent to which students:

0 1 2 3 4 1. Participate in actual work experience in on-the-job work sites (P.E.C.E. Program).

0 1 2 3 4 2. Appear to respond positively to the program.

0 1 2 3 4 3. Express interest in continued participation in the career development effort next year.

0 1 2 3 4 4. Participate in selection of unit direction.

0 1 2 3 4 5. Express a feeling of participation, involvement and contribution to unit activities.

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM
SECONDARY CAREER EXPLORATION AND PREPARATION
March 28, 1973

(0 - LOWEST to 4 - HIGHEST)
(X - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

A. COORDINATOR

The extent to which coordinator has:

0 1 2 3 4 1. Worked directly with at least two (2) teachers per subject matter per grade level to provide for the development of activity centered units.

0 1 2 3 4 2. Developed in-service activities for teachers, principals, and other personnel to include workshops for unit development, teacher-orientation and teacher exchange sessions.

0 1 2 3 4 3. Procured materials and supplies necessary for implementing career development activities.

0 1 2 3 4 4. Assisted teachers and students in locating sites for individual field trips.

0 1 2 3 4 5. Monitored on-going units.

0 1 2 3 4 6. Procured and scheduled resource persons for classroom visitation.

0 1 2 3 4 7. Developed community involvement through participation of parents.

0 1 2 3 4 8. Involved many segments of community in implementing unit activities.

0 1 2 3 4 9. Arranged for counseling sessions which relate to personal career planning.

0 1 2 3 4 10. Utilized a survey instrument to collect information such as future plans, present educational status, and interest.

0 1 2 3 4 11. Developed a newsletter to keep teachers informed of project activities at all grade levels.

0 1 2 3 4 12. Continued to implement a model for the placement program.

(0 - LOWEST to 4 - HIGHEST)
(NO - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

0 1 2 3 4 13. Made contacts with local industrial, business, and employment services to determine job opportunities in the community.

0 1 2 3 4 14. Made contacts with educational and technical training opportunities in the community.

0 1 2 3 4 15. Established a placement service to meet the existing needs of the identified student population.

0 1 2 3 4 16. Worked with the Work-Study Coordinators to identify job opportunities and place students.

0 1 2 3 4 17. Met with the principal and kept him informed as to the progress of the program.

0 1 2 3 4 18. Worked with teachers to acquaint them with the job placement program and conducted orientation discussions with individual classes.

0 1 2 3 4 19. Implemented a method of reporting and updating job placement efforts.

0 1 2 3 4 20. Informed students of job opportunities in the community.

0 1 2 3 4 21. Placed students in part-time and full-time jobs.

0 1 2 3 4 22. Developed a follow-up system on all students leaving the Sprayberry attendance area.

B. TEACHERS

The extent to which teachers have:

0 1 2 3 4 1. Presented subject matter concepts through the unit approach.

0 1 2 3 4 2. Incorporated academic tie-ins in classroom activity-centered units.

0 1 2 3 4 3. Incorporated role-playing techniques in classroom activity-centered units.

0 1 2 3 4 4. Incorporated occupational information in classroom activity-centered units.

(0 - LOWEST to 4 - HIGHEST)
(N - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

0 1 2 3 4 5. Incorporated hands-on manipulative techniques in classroom activity-centered units.

0 1 2 3 4 6. Incorporated resource persons in classroom activity-centered units.

0 1 2 3 4 7. Incorporated field trips to on-the-job work sites in conjunction with classroom activity-centered units

0 1 2 3 4 8. Demonstrated an understanding of the underlying concepts of the program.

0 1 2 3 4 9. Expressed interest in continued participation in the career education effort.

0 1 2 3 4 10. Involved students in the planning and implementation of units.

0 1 2 3 4 11. Utilized vocational labs in career development unit activities.

C. STUDENTS

The extent to which students:

0 1 2 3 4 1. Understand the relationship of subject matter areas to the use of these knowledges and skills in the world of work.

0 1 2 3 4 2. Appear to respond positively to the program.

0 1 2 3 4 3. Express interest in continued participation in the career education effort.

0 1 2 3 4 4. Receive help in determining their individual career objective.

0 1 2 3 4 5. Express a feeling of participation, involvement, and contribution to unit activities.

0 1 2 3 4 6. Demonstrate a knowledge of job entry requirements for their career choice.

D. COUNSELORS

The extent to which counselors have:

0 1 2 3 4 1. Been involved in occupational placement of students.

(0 - LOWEST to 4 - HIGHEST)
(R - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

0 1 2 3 4 2. Been involved in educational placement of students.

0 1 2 3 4 3. Been involved in technical training placement of students.

0 1 2 3 4 4. Worked on a systematic and scheduled basis with students in individual career guidance sessions.

0 1 2 3 4 5. Conducted one (1) career group guidance unit per nine week grading period.

0 1 2 3 4 6. Assisted teachers in providing occupational information related to individual student career objectives.

E. VOCATIONAL COUNSELOR

The extent to which counselor has:

Ø 1 2 3 4 1. Been involved in occupational placement of students.

Ø 1 2 3 4 2. Been involved in educational placement of students.

Ø 1 2 3 4 3. Been involved in technical training placement of students.

Ø 1 2 3 4 4. Worked on a systematic and scheduled basis with students in individual career guidance sessions.

Ø 1 2 3 4 5. Conducted one (1) career group guidance unit per nine week grading period.

Ø 1 2 3 4 6. Assisted teachers in providing occupational information related to individual student career objectives.

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM

(0 - LOWEST to 4 - HIGHEST)
(N - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

I. ADMINISTRATION

A. Central Staff

The extent to which central staff:

0 1 2 3 4 1. Is committed to continuation of career education at the end of funding.

0 1 2 3 4 2. Has specific plans for incorporating successful elements of the project into the on-going overall instructional program.

B. Principals

The extent to which principals:

1. Facilitate the activities of the project staff in carrying out the purpose of the program.

0 1 2 3 4	Elementary
0 1 2 3 4	Middle
0 1 2 3 4	Secondary

2. Participate in career development activities carried out by the project staff.

0 1 2 3 4	Elementary
0 1 2 3 4	Middle
0 1 2 3 4	Secondary

3. Understand and actively support project activities.

0 1 2 3 4	Elementary
0 1 2 3 4	Middle
0 1 2 3 4	Secondary

C. Project Administration

The extent to which the project administration:

0 1 2 3 4 1. Coordinates activities of project staff.

(0 - LOWEST to 4 - HIGHEST)
(B - NOT OBSERVED)
(IF YES OR NO, 0 - NO, 4 - YES)

0 1 2 3 4 2. Coordinates dissemination activities to the Cobb County System, other educational agencies, and USOE.

0 1 2 3 4 3. Provides for community involvement in the project.

0 1 2 3 4 4. Plans, in conjunction with the staff, future project activities.

D. Curriculum Writers

The extent to which curriculum writers:

0 1 2 3 4 1. Worked with teachers and career specialists at all grade levels to collect ideas, suggestions and reports of classroom activities which the writers then develop into units of work.

0 1 2 3 4 2. Developed the initial teacher units into a transportable format.

0 1 2 3 4 3. Developed a unit outline for teacher use in in-service and other planning meetings.

0 1 2 3 4 4. Produced materials that meet with a reasonable degree of resolution the technical excellence necessary for wide scale distribution.

E. Project Staff

The extent to which the project staff has:

0 1 2 3 4 1. Developed an in-service model to be used for school wide implementation.

0 1 2 3 4 2. Initiated dissemination activities to familiarize Cobb County educational, administrative and supervisory personnel with the program.

0 1 2 3 4 3. Initiated dissemination activities to work with the Ten Congressional Districts' career education mini-programs.

0 1 2 3 4 4. Initiated dissemination activities to school districts and other exemplary projects nationally.

Recommendations

General:

1. The resource units at all grade levels should be reviewed and a clearly defined scope and sequence established.

2. The model for career education as implemented in Cobb County should be outlined in specific terms for further clarification and to facilitate transportability.

3. The resource units at every grade level should be indexed to the existing Cobb County curriculum guides.

4. A minimum of one (1) career development specialist per instructional level (elementary, middle, secondary) should be utilized as a part of the instructional staff in maintaining successful aspects of the exemplary program.

Junior High (Middle School)

1. A specific format for exploration in the areas of: (1) Human Services, (2) Business and Distribution and (3) Manufacturing and Construction should be developed. It is suggested that the format developed for cluster exploration by Dr. Nevin Frantz, University of Georgia, be considered.

2. The teacher in the Manufacturing and Construction exploratory course should participate in the summer training course in the "World of Construction" offered by the University of Georgia.

3. One counselor should be designated to work full-time toward career development goals. Preferably an additional counselor should be added to the staff at J. J. Daniel, but, in lieu of such allocation, one of the present counselors should be designated.

4. The P.E.C.E. Program should be maintained and made available to all students at the middle school level.

Secondary Level

1. Funds should be sought from all sources (Federal, state and local) to provide an extensive curriculum development effort at the secondary level. This year's efforts are a considerable improvement over previous years in career education curriculum efforts and strongly suggest the need for further conceptualization in specific career education inputs into the on-going curriculum.

2. Vocational offerings at the secondary level should be expanded to accommodate students with increased awareness and exploratory experiences attained through the program at the elementary and middle school levels. Particular attention should be given to such offerings that would serve greater numbers of female students.

3. There should be a more clearly discernible articulation between the secondary program and the post-secondary educational opportunities in Cobb County.

4. There should be closer planning and coordination of activities between the vocational and academic teachers.

5. There is a need for more active participation by the principal in achieving the objectives of the career education program.

6. The Supervisor and staff of the vocational school failed to meet with the evaluation team, therefore, little can be said about the quality of the vocational offerings. It is suggested that the total vocational program be assessed in terms of content and numbers in meeting a variety of student needs and that the program be revised and/or expanded accordingly.

7. There should be departmental and grade level planning on the realistic and appropriate utilization of career education concepts in all curriculum offerings.

8. Counselors must assume a more active role in career education. In-service should be presented to facilitate the more active role.

9. A placement team (teachers, counselors, administrators and students) should be developed from existing staff at each secondary school.

BIBLIOGRAPHY

1. Byram, H. M. Evaluation Systems for Local Programs of Vocational-Technical Education. East Lansing: Michigan State University, 1968. Final Report of Project No. BR-7-0211.

2. Cobb County Proposal for Exemplary Programs: A Developmental Program of Occupational Education. Cobb County School System, Marietta, Georgia, 1969.

3. Cobb County Schools Comprehensive Study: A Guide for Educational Growth. Cobb County Public Schools, Marietta, Georgia, 1970.

4. Coster, J. K. National Inservice Training Multiple Institutes for Vocational and Related Personnel in Rural Areas. Raleigh: North Carolina State University, 1969. Project No. BR-9-0472.

5. House Report 1647, 90th Congress, 2nd Session. Report of House Committee on Education and Labor, 1968.

6. Parker, M. G. and Baker, R. A. Development of a Scale to Measure Attitudes Toward Vocational Education. Research and Development Report No. 1, Auburn: Occupational Research and Development Unit, Auburn University, 1970.

7. Shaw, M. E. and Wright, J. M. Scales for the Measurement of Attitudes. New York: McGraw-Hill, 1967.

8. U. S. Department of Commerce, Bureau of Census, 1970 Census of Population, Georgia. 1970.

9. U. S. Department of Commerce, Bureau of Census: Population Estimates and Projections, Current Population Reports, March, 1970.

10. Venn, Grant. Policy Paper AVL-V70-1. U. S. Office of Education, Division of Vocational-Technical Education, 1969.

11. Vocational Education Amendments of 1968. Public Law 90-576.

Conclusions and Recommendations

Based upon three (3) years' continuous inhouse evaluation and third party evaluation from North Carolina State University, it is concluded that career education is an operational effort in Cobb County, Georgia. The activity centered (unit) approach has continued to gain widespread acceptance from students, teachers, administrators and parents and provides the structure for the sequential growth that is career development.

The structure provides for regular experiences and for use of a variety of resources by all students. The structure also provides an answer for the teacher's question "What do I do and how do I do it?" It is the conclusion of this project staff that career education must be sequential (awareness, exploration and preparation -- in that order), that it is compatible with most other educational programs, and that directions for implementation to teachers must be specific. It is not enough that teachers subscribe to general goals nor necessary that they understand all the underlying philosophies of career education. It is imperative, however, that teachers accept and understand the mechanics of the delivery system. It is the experience of this project staff that teachers in the Cobb County exemplary program have derived most philosophies from their experience in the implementation process.

The Cobb County approach to career education has provided and will continue to provide the opportunity and the direction for students and educators to consider alternatives in decision-making.

For students, decisions concerning occupational aspirations and educational avenues; for educators, consideration of alternative methods of presentation and use of parent/student/community involvement; and for students and educators, the consideration of alternatives in choosing activities for personal fulfillment.

It is the conclusion of the project staff that in-service training to effect teacher attitudinal change is essential to the success of career education. It is our recommendation that such in-service training be of a practical nature and that it involve teachers in much the same way that teachers are directed to involve students.

It is the conclusion of the project staff that career education can be implemented as a part of a system's ongoing curriculum without large funding sources. A major dissemination effort of this project has been the presentation of the project with emphasis on utilizing existing facilities, equipment and teachers. Redirection of certain resources is necessary of course, however, it should be noted that this exemplary project has expended less than one percent (1%) of its total budget for equipment.

The use of community resources (people, facilities, materials) being vital to the success of career education, it is recommended that any system desiring to implement such a program involve community leaders in planning sessions; that the news media be used extensively for community orientation to the program; that presentations be made to PTA's, civic, social and service groups; and that specific requests be made to parents and to the business community regarding their contributions to the total educational process.

The most significant evidence of the program's success in Cobb County is manifest in the system's commitment (See Appendix G) to expanding the program's most successful components system-wide. The Cobb County Board of Education has adopted a policy statement advocating career education as a part of every youngster's learning experience and provided local funding for members of the project staff to function through the instructional staff in system-wide expansion. The project has also given rise to a locally funded county-wide job placement program which will function through the existing guidance program and will be coordinated by the project staff placement coordinator.

In addition, the Cobb County system has committed itself to increased vocational offerings and work experience programs at the secondary level and has implemented a quarter system which facilitates students' alternative choices and promotes an "open curriculum" for continued career development.

It is the conclusion of the project staff that career education promotes the community-wide feeling that education is the joint responsibility of the home, the school and the community and that students can be made aware of that joint responsibility.

It is finally the conclusion of the project staff that career education is not a manpower program nor an occupationally centered program, but an individual growth-centered program that promotes the feeling within students of the worth of themselves as people.

Joel Smith

Project Director

June 28, 1973

Date

APPENDIX A

COORDINATOR OF JOB PLACEMENT

The Board of Education and the administration of the Cobb County Schools are committed to providing comprehensive educational services to the pupils who attend our schools. It is desirable that these services include college placement for the college-bound pupil and job placement for the pupil who terminates his formal education at the public school level. As much pride should be taken in job placement efforts as in college placement efforts, though historically this has not been the case.

There is general agreement that we do a good job of college placement through counseling services in the high schools of Cobb County. Likewise, there is general agreement that more needs to be done in job placement.

To remedy the existing deficiency in job placement services, I recommend that we take one of the additional 16 section 33 (vocational) teacher allotments and assign him this task. I recommend that this person be assigned as a lead teacher under the supervision of Mrs. Corcoran, Director of Counseling Services. Specifically his duties will include:

1. Orient counselors to Job Placement Program for Cobb County High School System.
2. Establish rapport with principals, counselors and work-study coordinators, and to keep them informed of placement service.
3. Contact manpower agencies, personnel managers to establish lines for job placement.
4. Develop master list of all potential employers.

5. Have newsletter to inform counselors of job availability.

6. Maintain an up-dated employers' list.

7. Handle special student referral from counselors.

/s/ Harold N. Dennis
Harold N. Dennis, Associate Supt.
Division of Instructional Svcs.

/s/ Kermit Keenum
Kermit Keenum
Acting Superintendent

APPENDIX B

The Interim Evaluation Committee commends Daniell Junior High School on the following:

I. The committee feels that the administration and faculty have done a commendable job in not only carrying out the recommendations made in the original study but that the school should be commended for going beyond the recommendations in specific areas.

1. Attitude exhibited by administration, faculty, and students. Good order and an atmosphere of freedom conducive to learning.

2. Increased counselling personnel.

3. Reduced turnover in faculty.

4. Beautification of grounds -- cleanliness of building.

5. Intramural Program -- Person to administer.

6. Career Development -- Open the minds of teachers and students.

7. Increased Course Offering -- Exploratory program on 7th and 8th grade basis.

8. Activities -- Nineteen

9. Media Center -- Two librarians, clerk plus additional audio/visual equipment.

10. Parent Involvement -- (Dinner) Department Heads, Administration, Students and Parents reporting on entire curriculum of Daniell.

Summation -- A well balanced, well-rounded school.

APPENDIX C

Program outlines and activity-centered resource units were given to Project visitors during the past three (3) years of the Project.

October 8, 1970	Morgantown, West Virginia (2 people)
October 20-21	Knoxville, Tennessee (7 people)
November 17-18	Moberly, Missouri (8 people)
November 20	Walker County, Georgia (3 people)
December 1-2	Raleigh, North Carolina (2 people)
December 1-3	Washington, D. C. (1 person)
December 2	State Department, Georgia (9 people) University of Georgia, Athens (4 people) Georgia Southern College, Statesboro (1 person)
January 11-12, 1971	Minneapolis, Minnesota (2 people)
January 28-29	Bismarck, North Dakota (2 people)
February 4	State Advisory Council (8 people) Athens, Atlanta, Savannah, Cordele, Perry, Georgia Honorable Turner Scott, Thomaston, Georgia Honorable Jack Stephens, Atlanta, Georgia
February 5	Gainesville, Georgia (16 people)
February 12	Mr. Richard Ammons, Athens, Georgia
February 16	Lancaster, South Carolina (10 people)
February 17	Dekalb County, Decatur, Georgia (2 people)
February 18	Alma, Georgia (1 person)
February 26	Columbia, South Carolina (2 people) Winnesboro, South Carolina (9 people)
March 12	Lansing, Michigan (1 person)
March 18	West Georgia College, Carrolton, Georgia (2 people) State Board of Education, Atlanta, Georgia (1 person)

March 19	South Carolina (11 people)
April 6	EPDA -- University of Georgia, Athens, Georgia (4 people)
April 16	Marshall University, Huntington, West Virginia (1 person) Lincoln County Board of Education, Hamlin, West Virginia (3 people)
April 28	Memphis City Schools, Memphis, Tennessee (3 people)
April 29	Albany, Georgia (10 people)
April 30	Davidson County Schools, Lexington, North Carolina (3 people) Dalton, Georgia (5 people)
May 11	McRae, Georgia (13 people) Mr. Carl James, State Department
May 25	Cairo, Georgia (8 people) Alma, Georgia (7 people) Lawrence County, Alabama (4 people) Colbert, Georgia (7 people)
July 1	Wake County, North Carolina (2 people) Walker County, Georgia (2 people)
July 26	Baldwin, New York (2 people)
August 5	Department of Ind. Education, Mt. Pleasant, Michigan (1 person) Coloma, Michigan (3 people) West Georgia College, Carrolton, Georgia (2 people) Hamlin, West Virginia (4 people) Huntington, West Virginia (1 person) McRae, Georgia (1 person) DeKalb County, Georgia (2 people) Bainbridge, Georgia (1 person) Alma, Georgia (1 person) Dalton, Georgia (1 person) Danielsville, Georgia (1 person) Aiken, South Carolina (1 person)
August 6	Savannah, Georgia (1 person)

September 24	Gainesville, Georgia (4 people) Morrow, Georgia (2 people)
October 15	North Carolina State Deparmtent, Raleigh, North Carolina (2 people)
October 18	Mt. Pleasant, Michigan (8 people)
October 20	Covington, Georgia (7 people) Valdosta, Georgia (2 people) Lowndes County, Georgia (3 people)
October 21	Marshall University, Huntington, West Virginia (1 person) Camden, South Carolina (7 people) Big Stone Gap, Virginia (8 people) Appalachia, Virginia (3 people)
November 16	Oglethorpe Avenue School, Athens, Georgia (1 person) Wayne, Michigan (2 people) Athens, Georgia (8 people) Ohio State University, Columbus, Ohio (1 person)
November 17	State Department of Education (1 person) Morrow, Georgia (8 people) Junie Brown, Atlanta Journal, Atlanta, Georgia
November 18	Orange County, Orlando, Florida (3 people)
November 19	Huntington, West Virginia (1 person) Ruby, South Carolina (3 people) Wayne, West Virginia (2 people) Fort Gay, West Virginia (12 people) Chesterfield, South Carolina (7 people)
December 13	St. Paul, Minnesota (1 person)
December 15	Apapka, Florida (6 people)
December 16	Warren Consolidated, Warren, Michigan (4 people)
January 1, 1972	Dr Christian Burkell, New York
January 7	State Department, Atlanta, Georgia (3 people)
January 17	Virginia (6 people) Montgomery, Alabama (1 person)

January 18	Winter Park, Florida (1 person)
January 19	Farmington, Michigan (3 people) Orlando, Florida (5 people)
January 24	LDS Church, Decatur, Georgia (1 person) Provo, Utah (1 person)
January 28	New York University, New York, New York (2 people)
February 2	University of Minnesota (1 person) Michigan (1 person) Raleigh, North Carolina (1 person) SACS, Atlanta, Georgia (1 person)
February 11	Jackson, Georgia (5 people)
February 14	Atlanta, Georgia (1 person) Department of Education Thomson, Georgia (4 people) Orlando, Florida (10 people) Marshall, Michigan (15 people)
February 15	Eastern Kentucky University, Richmond, Kentucky (3 people) Soperton, Georgia (2 people) Paul Shelford, New Mexico
February 16	Cordele, Georgia (3 people)
February 17	Trenton, Flordia (2 people)
February 18	Department of Education, Columbia, South Carolina (2 people) Lookout Region Shared Services, Lafayette, Georgia (9 people) Georgia Southern College, Statesboro, Georgia (3 people)
February 21	General Learning Corporation (4 people)
March 10	Lancaster, South Carolina (1 person)
March 13	SACS, Atlanta, Georgia (1 person) CEEB, Atlanta, Georgia (1 person) Orlando, Florida (3 people) North Wilkesboro, North Carolina (5 people) Rockingham, North Carolina (5 people) Martinsburg, West Virginia (5 people)

March 14	Doubleday and Company, New York, New York (2 people) North Carolina (5 people) State Department, Atlanta, Georgia (1 person)
March 15	North Carolina (16 people)
March 16	Greensboro, Georgia (1 person) Phenix City, Alabama (4 people)
March 17	Shawnee Mission, Kansas (1 person)
March 30	Ernst Peutl, Vienna, Austria
April 13	East Detroit, Michigan (2 people)
April 18	Hinesville, Georgia (1 person) Austin, Texas (2 people) Beckley, West Virginia (1 person) Oak Ridge, Tennessee (5 people)
April 19	Beckley, West Virginia (14 people) Portland, Oregon (5 people) Broward County, Florida (3 people) Louisville, Georgia (3 people) Sandersville, Georgia (2 people) Pheonix, Arizona (1 person)
April 21	Radford, Virginia (2 people)
April 26	Stillwater, Oklahoma (2 people)
April 27	Cornell University, Ithaca, New York (2 people)
May 12	McKeesport, Pennsylvania (2 people)
May 19	Charleston, West Virginia (2 people)
May 31	Ramlins, Wyoming (1 person)
June 6	Statesboro, Georgia (2 people)
June 19	Canton, Georgia (2 people)
July 28	Santa Ana, California (1 person)
August 17	Coloma Community Schools, Coloma, Michigan (1 person)

August 25	State Deparment of Education, Baton Rouge, Louisiana (3 people)
October 16	Virginia (16 people) Rockingham, North Carolina (3 people) St. Louis, Missouri (1 person)
October 18	Michigan (4 people)
October 19	Huntsville, Alabama (2 people) Big Stone Gap, Virginia (16 people) Raleigh, North Carolina (3 people) Keene, New Hampshire (4 people)
October 20	Brandon, Virginia (3 people) NERCOE, Newton, Massachusetts (1 person) Vermont (5 people) Lawrenceville, Georgia (4 people) Rock Springs, Wyoming (2 people)
November 6	Morganfield, Kentucky (10 people)
November 8	Yonkers, New York (2 people) Columbia, South Carolina (1 person) Chamblee, Georgia (1 person)
November 9	Richmond, Kentucky (20 people) Gainesville, Georgia (5 people)
December 8	Norton, Virginia (11 people)
December 11	Lewiston, Maine (3 people) Monroe, Georgia (2 people) Atlanta, Georgia (1 person) -- American Education Magazine
January 30, 1973	Washington, Georgia (5 people) Charleston, Illinois (2 people)
January 31	Lawrenceville, Georgia (6 people)
February 1	Gainesville, Georgia (6 people) University of Georgia, Athens, Georgia (2 people) Duncan, South Carolina (2 people)
February 8	Northern Illinois University, Illinois (1 person)
February 13	Muskegon, Michigan (1 person) Georgia State University, Atlanta, Georgia (8 people)

February 16	Canton, Georgia (5 people)
March 8	Gainesville, Georgia (9 people)
March 23	U.S. Department of Labor, Atlanta, Georgia (1 person) Mr. Steve Dyer, Kingston, Jamaica
April 3	Cedartown, Georgia (6 people)
April 5	Forest Park, Georgia (8 people) S.P.I.C.E., New York, New York (3 people)
April 6	Rossville, Georgia (4 people)
April 11	Arlington, Texas (1 person)
April 13	Pennsylvania (1 person)
April 27	Lansing, Michigan (1 person) Florence, Alabama (6 people)
May 3	State Office, Atlanta, Georgia (1 person) Washington, D. C. (1 person)
May 15	Lafayette, Louisiana (3 people)
May 24	Holly, Michigan (8 people) Nashville, Tennessee (3 people) Brookline, Massachusetts (1 person) New York City (2 people) Baton Rouge, Louisiana (1 person) Indiana (8 people) Lewiston, Maine (1 person) North Carolina (2 people) Brooklyn, New York (1 person) Catholic University of Puerto Rico, PONCE, Puerto Rico (5 people) Trenton, New Jersey (1 person) Dallas, Texas (1 person) Pennsylvania (2 people)
May 25	New York, New York (4 people) Augusta, Georgia (1 person) Ohio (3 people) Indiana (6 people) Texas (2 people) Rome, Georgia (2 people) Virginia (2 people) Michigan (2 people) Blue Bell, Pennsylvania (1 person) Montgomery, Alabama (1 person)

May 25	Brooklyn, New York (1 person) Newark, New Jersey (2 people) SRA, Chicago, Illinois (1 person) Rockville, Maryland (2 people) Nashville, Tennessee (1 person) New Orleans, Louisiana (1 person)

APPENDIX D

Project Staff worked with the following Systems in developing In-Service Orientation and Workshops:

University of Georgia, Athens, Georgia

Presentation to P.E.C.E. Coordinators --
University of Georgia, Athens, Georgia

Presentation to Vocational Supervisors --
University of Georgia, Athens, Georgia

Washington, D. C.

West Georgia College, Carrolton, Georgia

New Principals Conference, Cobb County, Georgia
Statesboro, Georgia

West Georgia College Workshop
Carrolton, Georgia

SPAN Program, Memphis, Tennessee
West Georgia College Planning Committee
Carrolton, Georgia

West Georgia College Counselors' Workshop
Carrolton, Georgia

Presentation to Georgia Vocational Association
Convention in Atlanta, Georgia

Presentation to Instructional Staff, Walker
County Board of Education, Lafayette, Georgia

Orientation Workshop for Teachers and Counselors
of Ten (10) Congressional Districts, University
of Georgia, Athens, Georgia

Lincoln County, West Virginia

Chesterfield, South Carolina

Worth County, Georgia

Crisp County, Georgia

Elementary Presentation, Washington County, Georgia

Columbus, Ohio

Lansing, Michigan

Presentation to State Vocational Directors
Atlanta, Georgia

Secondary Presentation, Lithonia, Georgia

In-Service Workshop, Butts County, Georgia

Elementary Presentation, Putnam County, Georgia

Elementary In-Service Workshop, Walker County,
Georgia

University of Ohio, Columbus, Ohio

New Hampshire

Toccoa, Georgia

Montpelier, Vermont

In-Service Workshop, Wise County, Virginia

Battlecreek, Michigan

Port Huron, Michigan

Marysville, Michigan

Evaluation, Lancaster, South Carolina

Connecticut

Presentation to State Agricultural
Conference, Atlanta, Georgia

Michigan

Machias, Maine

South Bend, Indiana

University of Ohio, Columbus, Ohio

Rockingham, North Carolina

Martinsburg, West Virginia

Atlanta Tech Local Planning Committee,
Atlanta, Georgia

Louisville, Kentucky

Martinsburg, West Virginia

Clearwater, Florida

McKeesport, Pennsylvania

Kingwood, West Virginia

St. Louis, Missouri

Beckly, West Virginia

Radford, Virginia

Newbern, North Carolina

Henderson, Kentucky

McKeesport, Pennsylvania

Career Education Resource Center
South Bend, Indiana

Farmington School System
Farmington, Maine

Kent Intermediate School District
Grand Rapids, Michigan

West Texas Education Center
Midland, Texas

Wayne-Westland Community Schools
Wayne, Michigan

Griffith City School System
Griffith, Indiana

Region X Education Center
Richardson, (Dallas) Texas

Nashville School System
Nashville, Indiana

State Department of Education
Montgomery, Alabama

Career Education Resource Center
South Bend, Indiana

Appalachian Career Education Committee
Cullman, Alabama

Appling County System, Baxley, Georgia

Institute for Educational Development
New York, New York

Shelby County Schools, Shelby County, Alabama

Region 1 Education Agency, Edinburg, Texas

Sylacauga Schools, Sylacauga, Alabama

Scottsboro Schools, Scottsboro, Alabama

New Education Directions Institute
Pittsburgh, Pennsylvania

State Department of Education
Baton Rouge, Louisiana

Florence Schools, Florence, Alabama

South Bend Schools, South Bend, Indiana

Warsaw Schools, Warsaw, Indiana

West Nyack Schools, West Nyack, New York

New Educational Directions, Nashville,
Tennessee

Region VIII, Mt. Pleasant, Texas

Atlantic City, New Jersey

Cherokee County, Georgia

Helena, Montana

Ceres, California

Heflin, Alabama

Hart, Michigan

Potsdam, New York

Mt. Morris, New York

Kilgore, Texas

McKeesport, Pennsylvania

Lehigh University, Bethleham, Pennsylvania

Franklin, Indiana

Memphis State University, Tennessee

Wayne, Michigan

San Angelo, Texas

Athens, Georgia

Hart, Michigan

Heflin, Alabama

Centre, Alabama

APGA, Atlanta, Georgia

Providence, Rhode Island

New York

Tuscaloosa, Alabama

Lafayette, Louisiana

Rhode Island

APPENDIX E

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM

ELEMENTARY UNITS

Grades 1 and 2

"What Does My Family Do All Day?"
The School
Community Helpers
The Zoo
The Restaurant
Grooming Services
The Post Office
The Hatchery
The Dairy *
Puppetry *
Introduction to Space *

Grades 3 and 4

A Grocery Store -- Supermarket
Food Packaging
Food Distribution
City and County Government
"Careers Across Our Great Land"
Transportation -- Commercial Trucking
Transportation -- Commercial Airlines and the Airport
Transportation -- Trains
Protective Services
The Telephone
Careers in Conservation
Careers in Plant Sciences
Weather *
Careers in Music
Banking
Oceanography
Repair & Refinishing Occupations

Grades 5 and 6

Botany
Zoology
The Earth, A Great Depository
Careers in Hydrology
The Aerospace Industry
The Missile Project
Photography
Road Construction *
Building Construction
Television
The Hospital
The Election Process *
The Newspaper
Advertising *
Salesmanship
The Department Store
Sports and Recreation
Hotels and Motels
Art Careers
Arts and Handicrafts
Careers in Ceramics
Drama and the Theater *

* Rough Draft

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM

MIDDLE SCHOOL UNITS

Grade 7

Math Works in the Television Industry
Social Studies Works in the Television Industry
Language Arts Works in the Television Industry
In Wildness is the Preservation of Nature
Take a Trip on Language Arts
Animals in Literature and Life
Math in the Governmental Services

Grade 8

Invention and Design
Geometry in the Building Industry
Algebra and the Computer
Science and the Computer

Grade 9

Careers in Measurement and Layout
Processing, Producing and Marketing
Advertising
Bookkeeping: A Job Skill
Introduction to Typing Careers
Income Tax

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM

SECONDARY UNITS

Grade 10

Careers in Dramatics
You and Your World of Work
French Language Skills in the U. S.
Interviewing Work Roles
Algebra: Who Needs It?
Measurement: A Career Skill
Careers Utilizing Spanish

Grade 10 and 11

Geometry: Preparation for a Career

Grades 10, 11 and 12

Botany: Grafting

Grades 11 and 12

Mass Media: The Newspaper
Geometric Designs in Action
Government: The Labor Union
Chemistry: A Job Skill
Social Problems: Modern Living

Business and Distribution

Contracts
Typing II

Vocational, Grades 11 and 12

Sheet Metal: A Job Skill
Printing: Image Transfer

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM

Suggested Units on the First Grade Level

Introduction to Work -- Family Workers
The School
Introduction to the Community *
The Zoo
Grooming Services

Suggested Units on the Second Grade Level

The Model Community
Community Helpers
Introduction to Space *
The Dairy *
Puppetry *
The Hatchery
Post Office

Unit Appropriate at either First or Second Grades

Restaurant

Suggested Units on the Third Grade Level

Weather *
The Telephone
Music
Repair and Refinishing
City and County Government
The Grocery Store
Food Packaging
Rocketry *
Utilities *
Plants

Suggested Units on the Fourth Grade Level

Transportation
  Railroads
  Airplanes and Airports
  Commercial Trucking

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* Rough Draft Form

Suggested Units on the Fourth Grade Level, Cont'd.

Assembly Line Production
Oceanography
Space *
Conservation
Banking
State Government *
Exploring the States
Food Distribution
Geology *

Suggested Units on the Fifth Grade Level

Weather *
Botany
Zoology
Hydrology
The Earth, A Great Depository
Protective Services

Suggested Units on the Sixth Grade Level

Building Construction
Road Construction *
Photography
Hospital
Aerospace (The Missile Project)
Drama and the Theater *

Units Appropriate on either Fifth or Sixth Grade Levels

Art
Art and Handicrafts
Ceramics
Salesmanship
Television
Newspaper
Sports and Recreation
Hotels and Motels
Advertising *
The Department Store

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* Rough Draft Form

APPENDIX F

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM

DISSEMINATION MATERIALS

1. Program Synopsis (K-12)
2. Summer Workshop Booklet, 1971
3. Audio/Visual Bibliography (K-9)
4. Slide Presentations for Program Orientation (K-12)
5. Slide Presentation for Placement (10-12)

OPERATIONAL MATERIALS

1. January Conference Report, 1970
2. Planning Phase Report I, 1970
3. Planning Phase Report II, 1970 (Elementary)
4. Resource File Questionnaire
5. General Resource File -- Cobb County Schools
6. Resource Files -- Individual Schools
7. Behavioral Objectives (K-8)
8. Placement Manual (10-12)
9. Secondary Student Survey (10-12)
10. Community Business Survey
11. Curriculum Resource Units (K-12)
12. Unit Evaluation Reporting Forms
13. Textbook Analysis
14. Secondary Unit Development Format

15. Elementary Unit Development Format

16. Secondary Guidance Materials Handout

17. Guidance Materials

IN-SERVICE MATERIALS

1. Workshop Format Booklet (K-12)

2. Guidance Workshop Booklet, 1973

COBB COUNTY OCCUPATIONAL AND CAREER DEVELOPMENT PROGRAM

GUIDANCE MATERIALS
6-12

1. A Position Paper on the Role of the Middle School Counselor in Career Development. (Ann Cooper and Emily T. Corcoran)

2. Leader's Guide: Being and Choosing Group Record Booklet: Being and Choosing Student's Booklet: Being and Choosing. (Ann Cooper)

3. High School Courses and Career and Educational Goals. (Ann Cooper)

4. Bibliography for Career Development. (Emily T. Corcoran)

5. Games and Materials List. (Emily T. Corcoran)

6. Personality Variables: A Component in Career Choice. (Pat Mahon)

CAREER EDUCATION IN THE COBB COUNTY SCHOOLS

Four years ago the Cobb County School System was awarded a one year planning grant followed by a three year operational grant to develop a model curriculum in the area of career education. This exemplary program has been monitored by an outside team of evaluators and found to be highly successful. Inestimable favorable publicity for the Cobb County Schools has resulted from this program which has received much attention at the national level.

In applying for the original grant, a statement of support for the basic philosophy of career education for all students who attend the Cobb County Schools was clearly stated. This support has remained constant during the past four years of planning and implementation of the pilot program. At their regular monthly meeting in March, 1973, the Cobb County Board of Education reiterated this stand by formally adopting the following statement:

> "The exemplary Cobb County Occupational and Career Development Program has provided a philosophy for, and a practical approach to bring about such career development as one facet of the student's total growth.
>
> It is then our feeling that the processes and outcomes of the exemplary effort in Cobb County are compatible with the overall philosophy of the Cobb County Board of Education and that Career Education should be an integral part of the educational process for every student in Cobb County."

The primary objective of any pilot project in the Cobb County School System is to develop a theory or idea that will eventually be available to all the pupils that attend our schools. It is the consensus of the instructional staff and administration of the Cobb

County Schools that the pilot program in Career Education has developed a model that is transferable to all of the schools in Cobb County; that this can be done with relatively little local expense; and that once implemented in all the schools this program can be maintained as an integral part of the educational experiences of all pupils at no extra cost. The following proposal for system-wide implementation is offered:

PLAN FOR SYSTEMWIDE CAREER EDUCATION - 1973-74

BUDGET ITEM		OTHER	FEDERAL	STATE AND LOCAL
A. PERSONNEL	$56,575			(State
*SPECIALIST				$14,000 Vocational
*SPECIALIST				14,000 Allotment)
*SPECIALIST			$13,250	
*SPECIALIST			10,500	
SECRETARY				4,825
*(The four positions will be filled with personnel presently employed in the Career Education Project. Two will be paid from special state allotments and two from carry over Federal funds.)	Sub-Total		$23,750	$32,825
B. EMPLOYEE BENEFITS	$ 8,385			
SOCIAL SECURITY			$ 1,380	$ 1,920
RETIREMENT			2,041	2,819
GROUP INSURANCE			252	378
WORKMAN'S COMP.			40	55
	Sub-Total		$ 3,713	$ 5,172
C. TRAVEL	$ 3,500			
SPECIALISTS (4)			$ 1,750	$ 1,750
	Sub-Total		$ 1,750	$ 1,750
D. SUPPLIES AND MATERIALS	$ 900			
EXPENDABLES FOR IN-SCHOOL USE			$ 500	
OFFICE				$ 400
	Sub-Total		$ 500	$ 400
E. COMMUNICATIONS	$ 1,200			
POSTAGE		$ 600		$ 200
TELEPHONE				400
	Sub-Total	$ 600		$ 600
F. SERVICES	$ 3,950			
REPAIR & MAINTENANCE				$ 200
DUPLICATION & REPROD.		$ 2,500		
FILM & PROCESSING			$ 250	
DISSEMINATION (BROCHURE, TEACHER HANDBOOK)				$ 1,000
	Sub-Total	$ 2,500	$ 250	$ 1,200
	TOTAL	$ 3,100	$29,963	$41,947

It is anticipated that the regular staff of the Instruction Department will work directly with the Career Education Project staff members during the 1973-74 year of systemwide implementation and that the responsibility for maintaining this dimension in the educational experiences of all pupils will be assumed by the regular staff of the Instruction Department for the 1974-75 school year as well as ensuing years.

It is recommended that this plan of systemwide implementation of career education be approved.

/s/ Harold N. Dennis
Harold N. Dennis, Associate Supt.
Instruction Department

/s/ J. Milton Lewis
J. Milton Lewis, Superintendent
Cobb County Schools

/s/ Kermit Keenum
Kermit Keenum, Superintendent-Elect
Cobb County Schools